

Journal and Field Notes

Trinidad (concl.)

Tobago

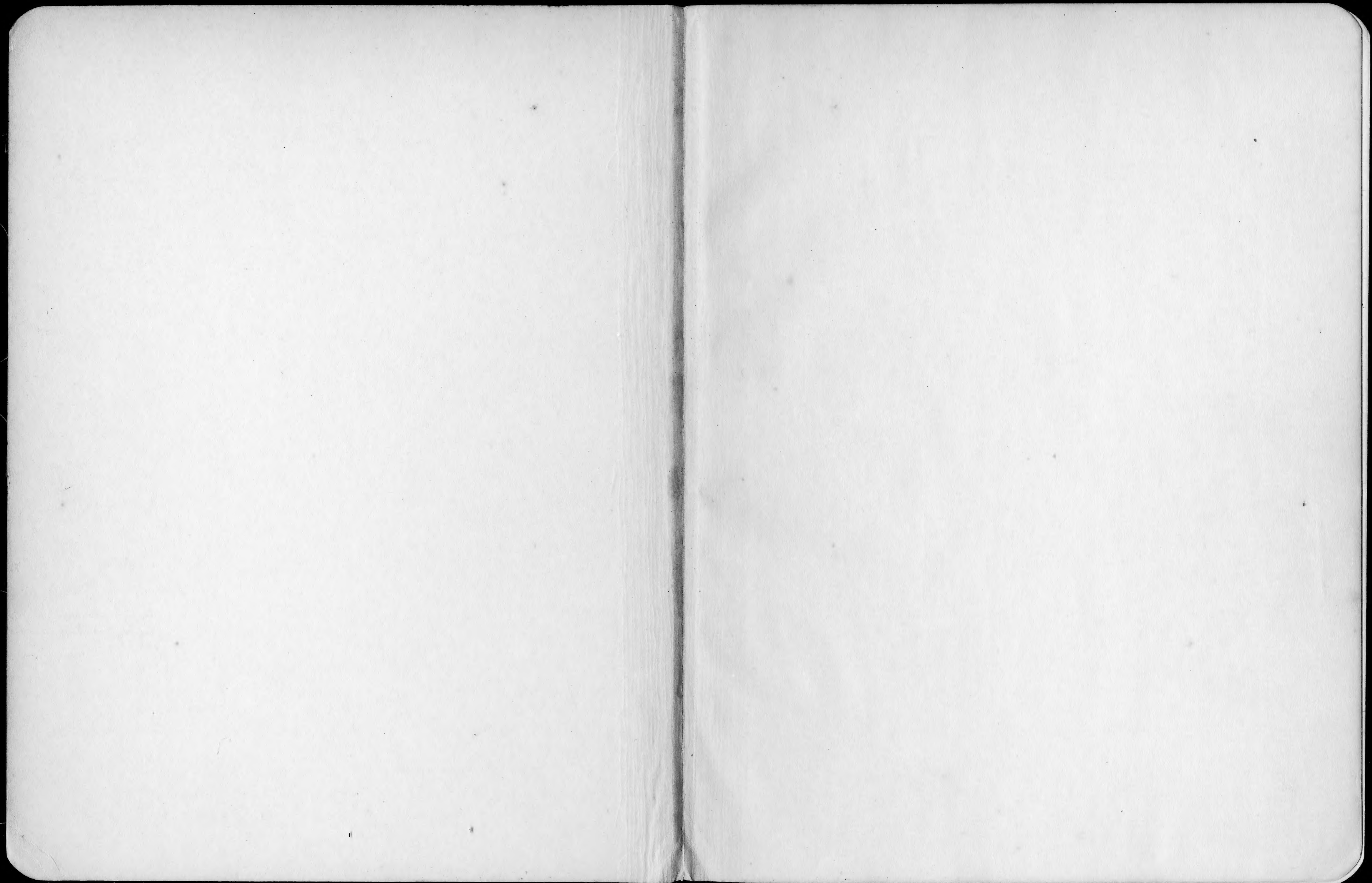
Grenada

Carriacou

St. Vincent

Barbados

Jan. 1936 - Mar. 1936



XII-27-35 In the morning went out to River Estate, Department of Agriculture Experimental Farm near the north coast northwest of Port of Spain. I had a letter from Dr. Pound to the manager, - Mr. O'Connor. He was not at the office when I arrived so I went out one of the small roads for about a mile and then stopped to work a log.

Station 109.

A River Estate, near Diego Martin, about eight miles northwest of Port of Spain. In fungus on a large immarcelle log took several species of *Staphs*, a few *Scolytids*, and several kinds of larval.

B Under bark were many *Passalids*, several very large larvae, several species of *Staphs*, and *Histerids*; also a Tailless-Whip-Scorpion and many small larvae. While I was working several natives came up, and they soon got to ripping off bark and kept me busy picking up the *Passalids*. I soon had to stop as all my bottles were full. I stopped again at the office and found Mr. O'Connor. He said it was quite all right to go anywhere on the estate. Got back to Port of Spain just ^{during} after a shower. It continued rainy in the afternoon. Spent much of the time on stamps. After dinner we went to the Empire Theatre to see "Lucie of a Bengal Lancer". It cost us 18¢ apiece.

XII-28-35 Out to River Estate again to work in a pasture.
Station 110.

Same as Sta. 109. In low dung took series of several species of Staphs, at least three Scarabs (Cepinae), Histerids, etc.

Also rode on as far as North Past and Blue Basin, but could find no cocoa pods. On this estate they are buried soon after cutting. In the afternoon worked on the index to Volume II of this journal. After tea worked on stamps with Ruth. Also tried to get my machete sharpened, but forgot that it's Saturday afternoon. Took my boat to be repaired, - from accident a week ago.

XII-29-35 Sunday. Don't really deserve a vacation, but took one anyway. The weather was threatening and cloudy and very windy in the afternoon. We were disappointed with lunch and dinner today. They were not up to the former standard. I am supposed to have limeade with each meal, but I seldom get it without asking, and perhaps then am told there are no limes today. In the afternoon I rode over to see if the Victoria Institute was open. Found that the hours are 9 to 4 on weekdays and 9 to 12 on Saturdays. We'll have to try again on a week-day. Worked on stamps.

XII-30-35 In the morning went to town to get photos, a map of Tobago, etc. The bank reports that our check has not been paid as yet. Went to see Capt. Sharp at the Constabulary to see if he would extend my 1935 Driver's permit for six days. He said he had no authority, and referred me to Lieutenant-Colonel Wilson of the Constabulary. Col. Wilson in turn declined the favor and referred me to the Colonial Secretary. In the absence of that official I went to the Deputy. After some discussion he concluded the law would not allow an extension, but suggested that I just continue to drive and refer any officers to him. It was the logical way out, but I had been afraid there would be too much conscience. Went out to see Pound at the Dept. of Agriculture. Will go out with him tomorrow. Also saw Urish at the bat laboratory. He promises to take me out to collect Lermite guano next week-end, and to give me some specimens he has taken before. Took my machete to a foundry to have it ground down. The shop foreman said he couldn't do it, but it developed that he meant to cut off the unnecessary part. I insisted that he grind it and he agreed to do it for 60 cents.

XII-31-35

Pound came by for me at 8:00 and we started for Moruga on the southern coast. The route was Port of Spain, St. Joseph, Couva, Princes Town, and Basse Terre. On a shortcut around San Fernando we passed through the refinery and saw what is reputed to be the "largest-in-the-world" cracking plant. Our destination was an estate belonging to a Mr. Herrera. While Pound and Herrera were looking at cocoa trees I did some good collecting in spite of almost continual light rain.

Station 111.

Herrera estate near Basse Terre on road from Princes Town to Moruga. In rotting cocoa pods I found several species of Staph, including among others a *Philonthus*, and a *Brachydirus*; also several Histerids, Mithridulids, and a *Calixys*; also several ants and a Forficulid.

Station 112.

Same as Sta. 111. Under bark of and in rotten wood of fallen Immortelle logs. Several specimens of a small Staph and several larvae under bark.
 A In rotten wood several *Passalus*, two *Taillors*
 B Whip-Scorpions, a myriapod, etc.; and beneath the log a slender gray lizard, rather sluggish at first but later quite agile.

Station 113.

Same as Sta. 111. In fungus found two weevils, two small beetles, and a Lampyrid (merely resting on a fungus-covered log). Lack of time prevented a careful search of the fungi.

Station 114.

Same as Sta. 111. One Brentid flying in rain.
 (1) This is the first one I've taken on this trip. Near the stables we passed a spot on the hillside where (either oil or) pitch is oozing from the ground. It has been leased to one of the oil companies who plan to drill there soon. We had lunch with the Herreras, - Mr. and Mrs. and three daughters. We then rode along the road to Moruga to inspect some banana groves. Found no collecting. Returned to the house for tea before starting home. This estate is on the top of a ridge adjoining the so-called Southern Range. The latter is indistinguishable from the surrounding hills and ridges.

Station 115.

The road between St. Joseph and Port of Spain. Three species of Staphs, including a *Philonthus* and a *Tachyporina*, besides several other beetles, flying into the car. On the way home Pound told me of the bad

hurricane which struck the southern part of the island in 1933. It flew down all the trees, and all the cocoa and bananas except in sheltered valleys. It was the first hurricane here in eighty years. The island is generally said to be outside the hurricane area.

Arrived home about 5 P.M. and went immediately to make arrangements to go to Tobago. The boat was the S.S. Trinidad and I talked to the First Officer. He said I could bring the motor aboard at eight o'clock; there were few passengers. So at eight P.M., after an early dinner, I went aboard and we pushed the motor up the gangplank onto the deck, where it was securely tied. The boat sailed at 9 P.M. I stayed on deck long enough to see us pass the Fine Islands, Liege Islands, Gasparee, and Monas Islands and enter the Caribbean.

I-1-36

New Year's Day. Arrived at Tobago at seven A.M. and got ashore by boat right away. The town is Scarborough; I didn't see any stores, and the population is said to be 773. Paid \$10.00 for the round-trip passage, and \$4.50 for the motorcycle. Got started along the Windward Road at 8:00, along the southeast coast. The island is about 25 miles long and 7 miles wide. The coast line is very irregular and the whole island hilly.

Photo #55
#56

My route for the day was Scarborough to Roxborough and Speyside on the Windward Road, return same way in the morning, then to Milford Bay, Canaan, Plymouth, and back to Scarborough in the afternoon. Found everything rather similar to Trinidad but more small-sawnish. First stop Station 116.

~~Fungus on a~~ Nine miles northeast of Scarborough, Tobago, on the Windward Road, vicinity of village of Pembroke.
A Fungus on a small log by the roadside yielded 4 Staphs of 2 species and 2 ants.
B A small pile of freshly cut cocoa pods yielded a few nice Staphs (especially *Philonthus*), and some *Mutidulids*.

Station 117.

13 1/2 miles northeast of Scarborough on the Windward Road, between Pembroke and Roxborough.
A Worked cattle dung for quite a while, getting ²⁴ Staphs, Sphaeridinae, and Coprinae (small).
B Fungus on a very rotten log had a nice series of a distinct Staph. The log itself yielded nothing. The road is improved most of the way, and rather rough near the end. I stopped on the bluff overlooking Speyside to take a picture that includes Little Tobago, an islet about 1 mile by 1/4 mile, across the entrance to the bay. (Exposure 1/100 + 22).

Onto this island have been introduced Birds of Paradise from New Guinea.

Station 118.

23 miles northeast of Scarborough on the Windward Road; Speyside or Pigeon Hill. Took one Elaterid flying.

Returned by the same route and stopped in Scarborough at the Post Office. Intended to try to get a set of Jubilee stamps after the dead-line, I just for the fun of it, but since it was a holiday, it was no sale.

Station 119.

1 mile west of Scarborough on the Windward Road. Under stones along edge of the Argyll River found two species of Carabids, one Hydrophilid, and 2 or 3 species of Staphs.⁽⁵⁾

As time was getting short I had to get on and didn't stop again till after I passed Scarborough. Got "motor essence" there and went on around the bay. The beaches I passed in the morning were washed clean and nothing could be found there. But now in this bay were several places where there was a hole in the coral reef and a very large amount of seaweed was washed up on fine wide beaches.

Station 120.

3 miles ^{south} west of Scarborough along the sea shore. Under seaweed took two species of Staphs, one is a *Cafius*, the best series I've taken anywhere. Then continued westward across the tip of the island to Milford Bay. This area is mostly in coconuts and much drier than the eastern part. Found nothing. Ate lunch, and then returned past Canaan and turned to the left on the road to Plymouth.

Station 121.

3/4 mile ^{north} ~~east~~ of junction of Canaan road with the road to Plymouth. Under horse manure found only 3 small Coprinidae.

This area is all in coconuts and the beaches are swept bare. Found no other place to collect till I neared Plymouth and turned off ~~on~~ to the east on the Scarborough road.

Station 122.

2 miles south-east of Plymouth, or about 3 miles north-west of Scarborough. In horse manure on the road found one Staph and one Sphaeridiinae. There is some cocoa here but I found very few pods and these yielded nothing. Took a photo looking through a bamboo clump. (Exp. 150 + 7). Continued to Scarborough, but

doubled back along the coast road to visit Station 123.

Departed Agriculture Stock Farm, 2 miles west of Scarborough. In cattle and horse dung found several Aphodiinae, many Sphaeridiinae, and a fine series of Staphs, including Philonthus, Paederinae, Oxytelinae, Aleocharinae, and Xantholininae.

A large crowd was watching some races nearby, but I returned to the pier at 4:30 to be sure to be on time. This time it was the S.S. Tobago (Trinidad Government Steamer). There were two cars to go aboard and I waited for them to be loaded. The first one started at 5:30. They lifted it with a small hand crane and put it in (or rather on) a lighter so small that only the front end would go down, and the rear wheels rested on the gunwale! It was pretty slow but they made it alright, and finally took the motor about 6:30. I went with it and helped get it in place on the deck. Then I went to see the steward. Found I had gotten the last berth on the boat. Ordered some tea and drank about a quart of water, the first drop since I left the house last night. Ate my sandwiches, etc. with the tea, and felt quite full. I sat down in the dining room

to write up my notes, but was interrupted by the sound of a radio broadcasting a football game. I then remembered it was New Year's Day and this must be the Rose Bowl game. I went on deck and was able to catch "Stanford" from the announcer. I asked the waiter to ask if I could go on the bridge to listen, and sent up my name and title. The captain said "Yes", so I went up. He was a very nice young Englishman, but not particularly interested in the game. It was Stanford vs. Southern Methodist from Dallas, Texas. I heard the third & fourth quarters. The final score was Stanford 7, S.M.U. 0, but Stanford was on S.M.U.'s one yard line with three downs to go! They had pushed S.M.U. back from near the center of the field and got the ball on downs on the 2 yard line! The announcer said that both Bobby Grayson and Monk Moscrip had gotten All American.

The captain painted out a castle on the ceiling of the bridge, and I got it.

Station 129.

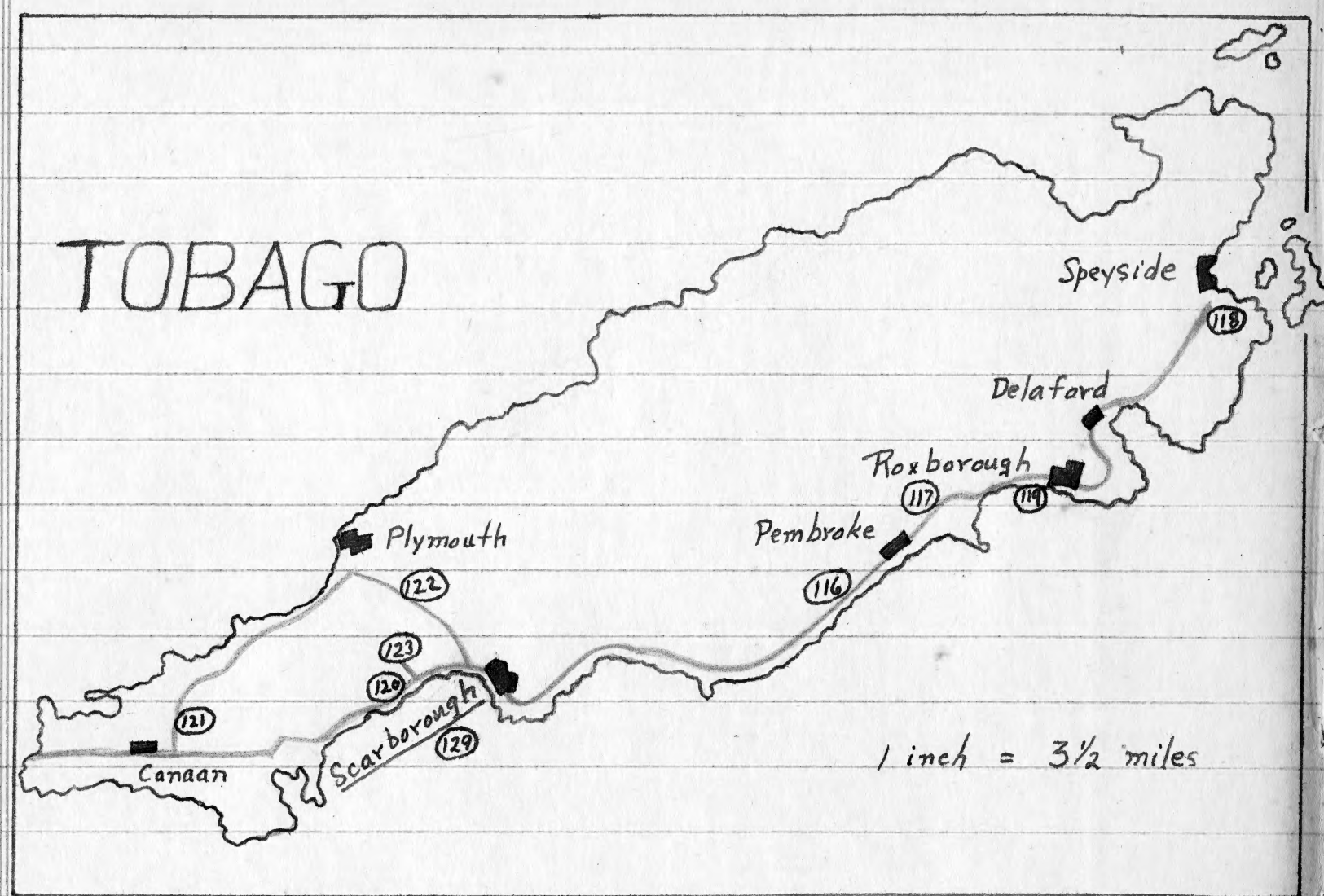
On board the S.S. Tobago, off Scarborough, Tobago. One Oedemerid flying. The captain invited me to wait and hear the

news, and then just as I was leaving, the bridge was invaded by Mr. & Mrs. Seymour (the Colonial Secretary), Mr. & Mrs. Beard (head of the Harbour Development Project), and Col. Mavrogordato (Inspector-General of Constabulary), who were returning to Trinidad and were evidently very friendly with the captain. I was introduced and explained my business and why I was dressed so roughly. I later stood on deck till we cleared the harbour, and then turned in to find my roommate, - a negro, - sound asleep. The following information concerning Tobago is from the Guide to the West Indies. The island is about 20 miles northeast of Trinidad and 75 miles southeast of Grenada. It is 26 miles long and $7\frac{1}{2}$ miles wide at most, with area of 114 square miles. Its geological formation is the same as that of the northern range of Trinidad. A main ridge of hills, 18 miles in length, runs down the center of the northern portion, culminating near Speyside, at an elevation of 1900 to 2000 feet. The central portion is undulating, with little valleys and conical hills, and the south end is quite flat. Scarborough (population 773) is the capital. History: Tobago has changed

hands more often than any other island in the West Indies. It belonged successively to the Spanish - 1498, British - 1616, Dutch - 1632, Indians (Caribs), British - 1642 and Dutch - 1654, Dutch - 1658, British - 1666, French - 1667, Dutch - 1667, British - 1672, Dutch - 1674, French - 1677, British - 1682, neutral - 1748, British - 1762, French - 1781, British - 1793, French - 1802, British 1803 - 1935. Since 1899 it has been a ward of the united colony of Trinidad and Tobago. The islet of Little Tobago is $1\frac{1}{2}$ miles from the north-eastern end of Tobago, off the village of Speyside. Birds of Paradise were introduced into it in 1909 from Dutch New Guinea, and the island was presented to the government as a sanctuary in 1929.

I have been told by several people that the fauna of Tobago differs from that of Trinidad only by omissions, - no distinct species are known from there. The *Capris* I found certainly appeared much lighter in colour than those from the other islands. Will see later whether it's the same on all or not.

It is interesting to note that Prof. Whitt's idea is just the opposite. Tobago is quite distinct, and is also related to Grenada faunally.



I-2-36

The boat docked at 6:30, but I had to wait till 7:00 for them to start unloading. They took the motor off first, and I was ready and rode off at once. They hadn't emptied the gas. Got home at 7:45 and had a bath before breakfast. I slept fairly well last night but I'm pretty tired anyway. My shoulder blades are quite sore from the knapsack straps, which I carried for the first time on the motor. Spent the morning and afternoon on notes, etc., and on stamps with Ruth. We're getting the big bunch nearly done. In the evening went to movie to see "The Dragon Murder Case."

I-3-36

Our First Wedding Anniversary. Last night Ruth gave me an anniversary gift, - a pair of little cut-glass knife holders to use as paper weights. I had admired them in Guadeloupe. Today was rainy and I was still too stiff and sore to feel like going out collecting on such a day. Worked on notes and stamps. Went to the bank to see if my check has come, but it hasn't. There's another plane tonight. It's about our last chance. We're very nearly broke, besides owing 75 dollars on our board and room.

I-4-36

At 8 A.M. Prof. Ulrich came by for me and we started out to collect Hermite guests. We went along the Eastern Main Road, and stopped first near Arima.

Station 124.

T.I.
(7 miles)

About one mile west of Arima along the Eastern Main Road. In a nest of *Nasutitermes* sp. found two species of Staphs, one very tiny white, the other black, about 4 mm. long, but both with the abdomen curved upwards over the body. Found several of the former, but only one of the latter. Also took the queen and soldiers. Some white coleopterous larvae were taken, and a myriapod also.

Station 125.

Two miles east of Valencia, or eight miles east of Arima, on a side road. In a nest of *Nasutitermes* sp. found no guests, but collected the queen and some soldiers.

Station 126.

Along the "5-mile stretch" on the Eastern Main Road, near milepost 24 (from Port of Spain) and about five miles northwest of Sangre Grande. In nest of *Nasutitermes* sp. found four small *Tachyporinae*, and two other beetles. Also the queen and soldiers.

Station 127.

Three-fourths of a mile from Sta. 126, and about four miles from Sangre Grande on same road (milepost 24 $\frac{3}{4}$ from P. of Spain). In nest of *Nasutitermes* sp. found two or three more of the *Tachyporinae*. Took the queen and some soldiers.

Station 128.

Two miles from Sta. 127 and about two miles from Sangre Grande on the same road (milepost 26 $\frac{1}{2}$ from P. of Spain). Took 44 ⁽¹²⁾ of the tiny *Tachyporinae* and three of another *Elaph.* Also the queen, a male (teste Vick), and some soldiers. Also took a small *Aedemerid* flying.

Vick's method of collecting the guests is to cut away the nest until a harder inner portion

is reached, in which is the queen cell. Large masses of eggs generally herald the approach to this part of the termitarium. This harder portion is completely separated from the rest and cut into until the rough chamber is exposed. This part is then held over a white cloth and knocked, - with a hammer or with a. The queen, workers, and guests fall out on the cloth, and it frequently takes repeated hard knocking to obtain them all. This is the method applied to *Nasutitermes* of various species. Other kinds of termites do not have staphylinid guests, according to Prof. Vick. The typical *Nasutitermes* nest has a hard outer layer (with perhaps a paper shell over all) with a softer under, the queen cell being in the soft part but immediately surrounded by an area of thick walled, woody and tough tissue. The nests of *Reticulitermes* can be distinguished at once by the earth content of the nest tissue. According to Vick the *Nasutitermes* that live along the sea shore (different spp.) have very different guests. He promises to send me some. Altogether today, we took four species of Staphylinid guests.

We arrived home in time for tea, and I persuaded Prof. Wick to stay. Ruth was away and had left a note saying she had gone on the boat that makes a circuit of the islands in the Bocas del Dragon. She went with Miss Higgins and arrived home just for dinner.
Station 129.

See under Tobago on page 11.

I-5-36

Yesterday I told Wick I was expecting to go collecting in the pastures of the Government Stock Farm at St. Joseph today. He insisted on introducing me to the manager, and so this morning he came by at 8:30 with his brother. They were going out for the day, so I followed them on the motor to the Farm. The manager was very cordial but insisted on sending a man with me. I didn't like it, but couldn't refuse. The man (really a boy) turned out to quite helpful. It was 9:30 before I got to work, which was the reason why I hadn't wanted Wick to bother about it.

Station 130.

Department of Agriculture Stock Farm at St. Joseph, 6 miles east of Port of Spain. In dung found a fine series of *Staph.* including *Philonthus*⁽¹⁴⁾, *Aleochara*⁽²⁾, *Pygmaea*⁽³⁰¹⁾, *Xantholimus*⁽⁶⁾, *Leucoparyphus*⁽³⁾ *silphoides*.

and others. Took at least 3 species of *Aphodius*, but few specimens. Perhaps 3 species of *Coprinae*, mostly in short tubes in the ground; the small purple ones and the browns occurring in the same holes. There were many *Sphaeridiinae* and several species of *Rhysodidae*. Filled three vials.

Before coming home I stopped at St. Joseph to see a place that buys stamps. Saw what they have, persuaded them that it was to their advantage to sell to me, and said I'd return. In the afternoon and evening I finished the cards from Smith's Glossary.

I-6-36

To town. To consulate for mail, and was surprised to get a large handful of first-class mail and a package notice. Went to the Post Office and received a bundle of second class matter. These were all mailed from Washington on Dec. 5th. Brought these home and went back down to the bank. They had cabled for the money. After deducting charges, exchange, etc. I received \$378.70 for \$400.00. Went to the Canadian National S.S. Co. agents and made reservations for tomorrow on the Lady Hawkins. Then went out to the College to see Mr. Adamson. Returned a library book and got my copy of Snodgrass. He gave me three vials of *Staph.* recently collected by him.

Stopped to say goodbye to Mrs. Adamson, and on the way home stopped at St. Joseph at the stamp place. Bought two lots of miscellaneous stamps, one lot of India stamps, and a few mixed ~~that~~ jubilee stamps for \$6.00.

Arrived home late for lunch, and shortly after took the motor down to the pier to wait for shipping. After two hours of running about satisfying clerks, customs, and sea agents, I finally got it crated at 4:45. Then went back to the agent to get our tickets. The boat is so crowded that we can't be in the same cabin. Reached home at 5:30 and found tea waiting.

At 6:30 went to see Prof. Ulrich at his home. Dr. Pickles was there also. Ulrich gave me several vials of terrine guano, and also a *Pardaliparus* from Venezuela. After dinner we started to pack the trunk as it has to be at the quay by noon.

I-7-36 Had to go to the pier by 8:30 to get the refund of \$45.00 deposited on the motorcycle. Waited quite a while for the papers and then had to go to the Treasury office for the actual payment. At request they rushed the papers through and I received the money. This took till nearly ten, and I then got two men with a cart to come out for the trunk. I beat them on the street-car. They took

the trunk for five shillings and I went back to the dock to finish up the Customs business. The chief inspector, Mr. Pouquet, was very kind, and said he would have the radio so that I could get it anytime this evening. Then I went to see the American consul, and left our forwarding address. Went to the bank to change my currency into bills of the banks that have branches in Grenada, so that they will be accepted at face value. Got home for a late lunch, and then packed my suitcases and the dunnage bag. I had put so much in the trunk that the others weren't crated. Phoned to Mr. M.C. Arner about the certificate for the zoo. He agreed to try to get the First Officer on the S.S. Verissa to take care of it to New York. If this fails he will send it by Air Express. Gave him one of the tags to the U.S. Despatch Agent in N.Y. We had tea a little early, and then got a taxi to take us to the 5 o'clock launch. After we had gotten to the pier and dismissed the taxi, I remembered the radio in the Customs. I had ten minutes so I ran over to get it. No one knew anything about it, but they finally phoned Mr. Pouquet. He had forgotten all about it, but gave instructions to deliver it to me at once. The man

who had taken our bags from the Sani had followed me, and now we ran for the launch. We made it, but the man was dissatisfied with the tip of two shillings that I gave him. The S.S. Lady Hawkins is a larger boat than the S.S. Merissa, but we don't like it quite so well. The food tonight was not quite so good. Before dinner I had a much-needed haircut. Ruth and I ~~had~~ were in separate staterooms, and I went to bed without seeing my roommate, whose destination is also Grenada.

Trinidad, which lies off the delta of the Orinoco, has an area of 186.2 square miles. Its population is about 340,000; that of Part of Spain, 64,000. The island is rectangular, with promontories at the four corners, those at the north-west and south-west enclosing the Gulf of Paria. It is separated from ~~the~~ Venezuela at the south by the Boca de la Serpiente, and at the north by the Bocas del Dragón. The island is somewhat mountainous, and has three distinct ranges of hills running east and west, the highest points being Cerro de Aripo (3,085 ft.) and Tucuche (3,070 ft.), both in northern range. The rainy season generally extends from May to December, with a short break in September, and

The island is outside of the hurricane area. It was, however, visited by one in 1933.

History: Spanish-1498, British-1595, Spanish-1595, British-1797 to 1935.

We found Trinidad the coolest island we have been on so far. Of course this is chiefly owing to the season. The rains were just ending, but winds were rather frequent.

Things which attracted our attention include: The tiny tram-cars with hand-brakes and the wheels only about six feet apart; the tremendous amounts of merchandise on display in the stores; and the size of the latter; the large number of persons on the government payroll; the 20 cent-a-gallon gasoline tax; the general cleanliness of the city; the fine Ford garage, the only modern one in the city; water mains along main roads, with hydrants every mile.

One of the things given to me by Adamson is a fine long slender Stenus.

I-8-36 Arrived at St. Georges, Grenada about 6 A.M. The immigration officers came aboard at 6:30, and we had to wait from then till 7:30 for breakfast. At 8 we got into the launch, and after considerable waiting and turning back, finally got to shore. About 6:15 the steward had delivered to me a note to me from the manager of the Dome Hotel saying that the porter would be at our service. When I got up on deck, the porter, Cromwell by name, came around, but I said wasn't sure where we would go. Later the manager himself, Mr. Jackson, came to see us, and said he had heard from Langford and wanted very much to have us come to his hotel. We let him take our baggage and decided to go first to see his place. When we landed, Cromwell had our bags in the Customs. I showed the inspector our letter of introduction and the letter promising free entry. He let everything thru without examination, and we all went up to the hotel - about a half block away. Mr. Jackson showed us what he called his best room and we decided to take it without further looking. It has the usual dresser, clothes press, and washstand, but it's large enough to accommodate two bunks, one a large one.

There is \$45.00 a month apiece, or \$3.00 a day for both. This is the lowest we've found. As soon as we were settled I started out to see about the truck and the motorcycle. They hadn't come ashore yet, but Suggins & Co., the agents, had a package of mail for us, including these notebooks. Went to see the Chief of Police about licences. He was not in at first and I finally got to see him just before lunch. He was very pleasant and accommodating. He gave me the application forms and filled them. I then went to the Treasury and paid 5 shillings for the Driver's Permit. A note from the Colonial Secretary said I would not have to get a license for the motor. So I went back to the Chief, who gave me a note of permission, in case I get stopped. He also said that if I get in trouble anywhere in the island to phone him, and I can use the guest rooms at the Police Station if necessary. He lent me a copy of the Grenada Handbook. I then went to see the Colonial Secretary. He seemed very busy and wanted to get to the point and finish it, but he was quite accommodating and said I could go anywhere in the island.

He gave me copies of the two maps available, one published 1900, the other 1932. Both seem to be rather inaccurate. After lunch I put on my old clothes and went down to uncrate the motorcycle. I had to pay \$3.00 lightage charge, but no customs. Found the motor had come partly loosened, and the crate is somewhat damaged. I'll have to watch it after this and make sure it isn't dropped. The motor wasn't hurt much, - one dent. Gasoline here is more expensive than in Trinidad, 46 cents a gallon (Imperial), 20 cents is tax. Dinner was fairly good. The fish was not as good as in Trinidad, and there were not so many fresh vegetables.

I-9-36

In the morning bought a can of Aluminex grease and greased the motor. Cleaned the spark plug and found the seal one badly carboned. As the motor was warm I couldn't adjust the valves, but checked the chain. After lunch I rode through the town to the north about a mile, and then up the Grand Etang road for about five miles. Started picking away Trinidad specimens. There is a month's accumulation to be done and I only finished half. In the evening started organizing the Journal

up to date in this book. Had previously been keeping it on scratch paper. Went to the map of Tobago on page 14.

I-10-36

In the morning wrote letters to the American Automobile Association, Dr. Warm, to Sherman of Clemson College, S.C., and Robinson in Texas. I typed the list of collecting specimens to go in my next letter to Ed. After lunch I rode out to the south on the roads to Long Point and Point Saline at the southwest corner of the island. Found the Grand Anse beach, which is renowned for swimming, to be lined with coconuts and completely free of seaweed.

Station 131.

2 miles west of the town of Grand Anse; on the peninsula of Pt. Saline. In rowing took a fine series including Staphs (Oxytelinae, Psepheninae, etc.), Histeridae, Sphaeridiinae, six or eight specimens of a small Coprinae, and at least two species of Ophidiinae.

This southern area is quite dry. Even now at the end of the rainy season it is brown, and giant cacti are quite common. The numerous narrow bays make rather striking scenery on all this south coast.

I-11-36 It was rainy all day. I didn't go out at all, but worked most of the time with Ruth on stamps. We went to the Post Office to inquire about the boat that goes to Carriacou, and then got a set of the current stamps. Got caught in a shower coming back. The radio is working fine after its two month vacation. A large cockroach came in the window in front of me and came right across the table into my bottle.

I-12-36 In the morning rode out along the main road east of St. Georges. It is well lined with native houses and there is little opportunity to collect. Cocoa is grown in very small patches generally.

Station 132.

Milepost 6 1/2 east of St. Georges on the main road, parish of St. David. In cocoa pods took a large series of Wasps, including *Phaenocarpa*, *Pachymeria*, and *Pristiphora*, and *Tachyphorinae*. Also a few *Forficulidae*. Kept an eye open for *Armitia* but didn't see any. There are several very fine views from this road, especially the one overlooking the lagoon.

Photo #57

In the afternoon I rode along the coast road north of St. Georges as far as Ganyane. Just south of the town is a hundred foot cliff of conglomerate, from which I took a sample, for E.B.

Station 133.

1 1/2 miles north of St. Georges, or 1/2 mile south of Ganyane on the coast road. In soft white limy sand found an immense number of tiny *Staphy* of two or three species (one red, one black), and at least two other beetles.

The beaches along this road are quite clean, without a trace of seaweed or anything but driftwood. On the return trip stopped to take a photograph of St. John's Harbour, - so called, looking from Westford toward Perseverance. Exposure 1/100 + 11.

After tea and in the evening we worked on stamps. One of the house boys is bringing us all the stamps he can find. He says he generally sells them here in town for 12 for 1d., or 6 for 1d.

I-13-36 Monday. Tried to start fairly early today for an all-day trip, but it was 9 o'clock before I got away. My route for the day was St. Georges, Grand Etang, Grenville, Sauthard, Ganyane, and back to St. Georges thus encircling the northern half of the island and seeing all the towns of any size. The so-called Grand Etang is about midway between St. Georges and Grenville, but on the east side of the divide. It is called on one of my maps the Great Pond. It is a great disappointment, not appearing volcanic at all.

Photo #58

The road is pitched about five miles out of St. Georges, and then becomes quite steep, narrow and crooked. In early morning rain had left it wet and I slipped a great deal on the paving stones and grass. The scenery is very fine and the vegetation exceedingly dense. I could find no place to collect until I got nearly to Grenville.

Station 134.

3 miles west of Grenville on the road to the Grand Etang. In very old cocoa pods I found one *Psephenidae* and one *Torpilid*.

The cocoa is in such small plots that it is very hard to find old pods.

Station 135.

1 mile north of Grenville, at milepost 23 (from St. Georges). On fungus on a log, 2 *Erosylids*. Stopped several other times to look at fungus, but it was dry and hard.

Station 136.

3 miles north of Grenville, at milepost 25 (from St. Georges). In fungus found 2 ants and about 10 *Staphs* (perhaps they are all *Thrips*). Passed fairly close to the mountain which contains in a crater Lake Antaine. It really looks somewhat like a volcano.

Station 137.

One mile south of Sautours, at the northern end of the island. In cocoa pods took a fine series of *Staphs*, including two species of *Tarby* perinae (apparently both *Coproporus*), *Paderinae*, *Cryptelinae*, etc. Also several *Torpilids*.

A mile or two beyond this point I stopped to take a photo of a pile of freshly-picked cocoa pods beside the road. Exp. 1/50 + 11 at 12 ft. I find the best collecting in the fairly fresh pods that have been taken open or which have a few of the beans left inside. The dry ones yield their beetles when strongly "knocked" over a white cloth. Some natives that came by the fresh pile stopped to talk and I asked them some questions about their handling of the beans. Had lunch.

Station 138.

6 miles north of Sautours, at milepost 18 (from St. Georges on west coast road). Under dung in the road found one *Cryptelinae*. This road follows the coast very closely and is for the most part cut out of the cliff. The hills come right down to the water. The beaches are quite free of seaweed as those farther south.

Station 139

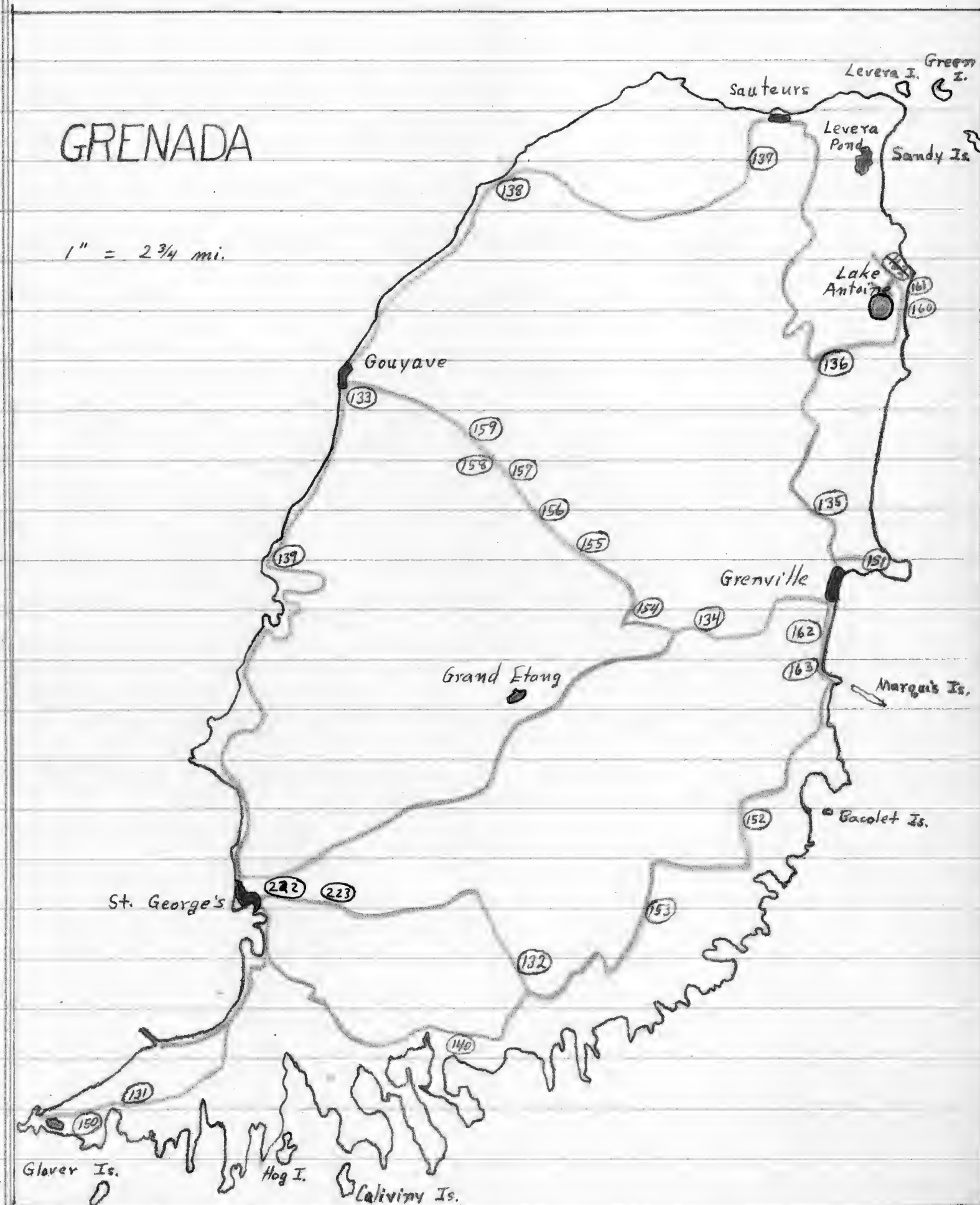
9 miles north of St. Georges on coast road. In dung found a fine series of beetles. The Staphs include 60 specimens (2 *Philonthus*, 39 *Oxytelinae*, and 19 *Allocharinae*). *Histeridae* (4), 3 species; *Sphaeridiinae* (9), one species; *Coprinae* (3), 1 species; *Aphodius* (106), probably only one species; minute beetles, $1 \times \frac{1}{2}$ mm., 6 specimens. 1 Forficulid. Got home in time for tea. The boy brought up a few more stamps. His name is Wilfred; we are going to keep count and pay him at the end of the week. Spent the evening on stamps and Journal.

I-14-36

Was a little tired today and stayed at home. Spent some time helping Ruth catch up on the copying of her Journal. She had been writing on scratch paper for over six weeks!

I copied the map of Grenada on the following page, and put away more specimens. I am nearly caught up now.

In the afternoon I went over the hill to do an errand or two. Bought a two-way socket, called "adaptor" to use on these English style light systems. It cost $3/6$, and is marked G. E. C. I wonder if it's a General Electric. Stopped at printery that buys used stamps, but the "base" was not in. Dry again.



I-15-36 In the morning rode out south and east along the Caliviny road to St. David parish, and back along the main road. Was watching particularly for termite nests, but also for fungus or dung. The former seem to be very scarce in the rest of the island, but here near the ocean where it is rather dry there are a few more.

Station 140.

Near village of Westerkell on the south coast, about six miles southeast of St. Georges. Opened three termite nests - all *Nasutitermes* sp. In the first found one moderate sized queen but no guests - with the possible exception of black ants. In the second nest found four very small queens?, but not guests, except one of the pale *Thysanura* or something like that. In the third nest found at least eight medium sized queens and several of what are apparently smaller ones. No guests.

In a small pile of dung found one small *Coprinus* (Canthar), but nothing else.

Returned along the main road past station 132, without finding any other place to stop. These roads are all pretty completely lined with native houses, and much of the trees and brush are kept out back for some distance. There seem to be no termite guests (Slugs) here.

In the afternoon I went to the office of the Colonial Secretary to see about going to Carriacou. They sent a letter of introduction to the Resident Commissioner Mr. ^{Knight} Wright, and told me when and where the motor launch leaves tomorrow.

I-16-36 Packed my things in the knapsack and got a small lunch. The launch left at 10:30, and the weather was calm and clear. I was not troubled by seasickness till we rounded the northern end of the island, stopped for a few minutes at Sauxiers, and headed north for the Grenadines. The launch is really not made to accommodate passengers. The only place to sit down is the flat top of the cabin, and I didn't succeed in getting a place there. I lay down on a bunk about 4 feet long, and felt ok as long as I stayed there. It was rather hard on my back though. Stayed down till we reached the jetty at Hillsborough, - three hours! We passed Diamond Rock or Rick-em-Jenny, and picked up a passenger or two at Isle Ronde. Arrived at Hillsborough, Carriacou, at 3:30 P.M. I went immediately to the office of the Commissioner and was cordially received. He invited me to tea and sent to arrange for me to stay at the Government Rest House, - and for meals.

Another passenger, colored, by name of Cokern, practically invited himself to stay with the commissioner, but was tactfully refused. Mr. Knight sent for a Mr. Simmons, the agriculture man for the island. He is a pleasant, intelligent and fairly well educated negro. We talked some of the fauna and flora of the island and then I walked over to the Botanical Garden, which is an experimental garden. Here they are growing cotton, limes, grapes, onions, pigeon peas, etc. One lime tree was completely covered with a small white scale, called locally "snow scale". It is on the trunk, branches and twigs, making the tree appear actually white. This is

Station 141.

Botanic Gardens at Hillsborough, Carriacou. Took one *Nidichulid* in cotton flower; one weevil on a weed; and a twig covered with snowy scales - Mr. Simmons says a *Chionaspis*.

When we got back to the office Mr. Knight said that he hadn't been able to make satisfactory arrangements for the Test House, so he would take me home with him. He said he is not settled yet (in office just three weeks), but I would be more comfortable there. He



sent me a British Admiralty chart from which I traced the above map. It does not show Petite Martinique at northeast corner; there are four distinct islands near Saline I.; and three rocks near One Tree Rock. The "towns" marked are usually just one or two houses, - no stores or anything.

While standing around at the office, I was approached by a tall, thin negro with rather weak eyes who introduced himself as Mr. Porter, F. E. Porter, George Dudley Porter, 722 V., a native Barbadian, in Carriacou for his health for twenty years, having faithfully ^{worked} his King in the Trinidad Light Infantry "Blue Bells", number 20, his rifle number 120, at the time of the change to the Lewis-Enfield rifles, sings at local socials, and "I am ready". He was obviously anxious to meet any strangers, to tell his story and end his repetitions, and to learn something from the other. In a word the bare name was all he got from me. At least he didn't ask for money!

Mr. Simmons has a Limy Bus Lim. Strictly speaking there are no "roads" on the island, but the map shows quite a few, and these can be travelled by car if necessary. At any rate he drove Mr. Knight and me up to the farmer's house on a saddle overlooking both the Atlantic and the Caribbean, at Belldair. This is a nice stone house of six or seven rooms built a few years ago. Mr. Simmons promised to take me about the island tomorrow and will come by at 7:30.

Mr. Knight is a negro, but does not impress one as such. He is very dark, but his speech, manners, habits, etc. proclaim his education and culture. We talked before and after supper and I learned quite a few things about Dominica, from which he has just recently come. He ~~must~~ ^{must} have been some sort of an engineer ^{there}. He said he would write to Mr. H. D. Shillingford, a planter in Dominica, who would be able to give me some aid there. He recommended the Cherry Lodge Boarding House run by J. V. Tavernier in Roseau.

Mr. Knight has been trying to interest his son Curtis in collecting stamps. He has gotten quite a few of the near-by Jubilee sets, and gave me several which we do not have. He says he likes to give, and is not interested in exchange. They are interested chiefly in West Indies, and in stamps of historical or other interest.

He says that in Dominica, at least, one can pick up shillings of George III, and others of the eighteenth century. Also double florins common. Station 142.

Home of Mr. Knight at Belldair, near Bellevue Hospital, about two miles north of Hillsborough. One bee flying to light.

While discussing the relationships of the faunas of the various islands, Mr. Knight told me of the following mammals on the islands:

^(Manicou) *Opussum* - Carriacou, Dominica; Monkey - St. Kitts, Grenada; *Araucari* - St. Vincent, Dominica. The mongoose is in St. Vincent, Grenada, etc., but is prohibited by law from being taken into Carriacou or Dominica. There is a sea anemone in Dominica.

I-17-36

Still felt a little shaky from yesterday, so went light on breakfast, though it was good. We had orange juice, papaw, corn flakes, bacon & egg, toast & marmalade, and tea or coffee.

Mr. Simmons came by in the Austin, and we started out along the so-called roads. Our route for the day was through the villages or districts of Mt. Pleasant, Limlair, Windward, Meldrum, Craigston, Hillsborough, Harvey Vale, Belmont, Eastern Peninsula, and back to Hillsborough. The beaches on the west side have no seaweed, but on the east it is more varied than usual.

Station 143.

Near Mt. Pleasant on the eastern coast of Carriacou.

A Under seaweed on the beach, after considerable searching, found two *Cafius*, one small *Aphodius*, a weevil, and two tiny *Beetles*. In saw dung and burro dung took 25 *Staphs*, including

Philonthus (2), *Oxytelinae* (8), one sp. of *Allocharyinae* (12), and another (5); also *Aphodiinae* (10), *Coprinae* - 2 species (1 each), *Myriapods* (2), and ants (8). Of the *Coprinae* one is flat-backed and dirty, - the other convex and shining. One termite nest was a complete failure, - no guests, no queen. Another yielded a very large queen, some small ants (??), one small pale insect like a *Thysanuran*, but no *Staphs*. It was raining lightly most of this time, but cleared up now, and stayed clear all day.

Station 144.

Near Limlair on the northeastern coast of Carriacou.

A In sheep dung found one *Oxytelinae*. In saw dung were 10 *Staphs*, including: 2 sp. *Philonthus*, (4+1), *Bledius* (1), 2 sp. *Allocharyinae* (3+1); also four species of small *Coprinae*, one flat and dirty (4), and 3 sp. convex and shining (2+5+2); 2 sp. *Aphodiinae* (5+1); *Histeridae* (1); and two *Myriapods*. On the beach found

C no *Staphs*, but two kinds of *Carabids* (1+5), the latter the same as in Puerto Rico & Guadeloupe.

Took a sample of pond for *Staphs*. Took a photograph of the inside of a huge masonry well - dating from days of slavery. Exp. 1/5 + 11 at 25 ft. Took a large number of mealybugs on the pods of a prickly acacia (), and also several caterpillars on a sp. of *Crotalaria*.

Photo #60
#61, #62

Station 145.

Near Windward on the northwest coast of Carriacou. Found in a small pile of refuse outside the nest of parrot and (Chap. in King and really known as big-head ants), and in the pigeon chamber. Found nothing but the ants.

Station 146.

Near Craigston on the northwest coast of Carriacou. In a pile of limes, refuse from a refinery, found, very far apart, one Staph., an *Oxytelinae*, one *Aphodius*, and two sp. of *Nitidulidae* (1+2).

From here we went to Belldorrough where Simmons got some lunch and I ate the one that had been prepared for yesterday, plus a thermos of lime juice that Mr. Knight had had fixed for me. We then went on to the south coast, and stopped at

Station 147.

Near Barneydale on the southwest coast of Carriacou.

In row-dung found 30 Staphs, including: *Oxytelinae* (15), 2 sp. *Allopharinae* (13+1), and *Pae-derinae* (1); also *Aphodius* (2); *Sphaeridiinae* (3); *Torficulids* (2), and ants (2). In a large termite nest, found no queen and no guests, although I seemed to have found the queen cell and center of the colony.

From a hill near Belmont, a short distance southeast of Barneydale I took a photograph looking across the bay toward Cistern Peninsula (northwest). Exp. 1/100 + 15. Then I took one looking south, showing some of the smaller Grenadines, Isle Ronde and Pick-em-Jenny, and in the distance Grenada. Exp. 1/100 + 16.

Station 148.

Belmont School at southwest end of Carriacou. In a termite nest found queen but no guests. The teacher sent out several boys to look for nests of "wood-lie", but the only one found was broken up and brought in piece-meal. In spite of this I found the queen cell intact and found the queen, as alone.

Station 149.

Cistern peninsula, extreme west of Carriacou. Found one or two mealybugs on logwood. Also a few on *Psidium subsessile*.

We drove back to Belldorrough, picked up Mr. Knight and drove up to the house again. Here we had tea, and Mr. Knight questioned Mr. Simmons about the Carriacou Literary Guild, which he claims would be more appropriately called a Mutual Improvement Society as it is not merely literary.

Mr. Knight also expressed himself as quite disgusted with the slowness and disinterestedness of the people on the island. I don't know how good a commissioner he will be, but he will certainly try to improve things for the people. Mr. Simmons listed the products of the island as Cotton, peanuts, limes, onions, coconuts, yams, pigeon peas, mangrove oysters, and fish.

After supper Mr. Knight went back to town on horseback to give a talk to the Literary Guild. I sat on the verandah for an hour or so and talked with Curtis and Monica.

I-18-36

At 8 A.M. Mr. Simmons came by and drove Mr. Knight and me down to Hillsborough. I got a blank envelope from Mr. Knight and sent a registered letter to Ruth, enclosing the stamps Mr. Knight had given me. Cost 2d. Mr. & Mrs. Haydock and small son were going to Grenada on the launch and there was a considerable crowd on the jetty. Said my thanks and goodbyes to Mr. Knight and Mr. Simmons, and went aboard to save myself a place in which I would lie down with some comfort. The boat left at 9 o'clock, with clear and calm weather, and assurance of a smooth trip, as these ships go.

(From The Grenada Handbook for 1915).

Carriacou lies about 20 miles north of Grenada; the only town of the island being Hillsborough. Area about 13 square miles. There are no streams, the water supply being derived from springs, wells, rocks, and ponds. The highest point is Bellevue Point (called on the maps High North), 980 feet. "The island of Carriacou appears to be in the main composed of beds of fine-grained volcanic sands and tuffs. On the eastern slopes of the island and at Belair, at an altitude of 600 feet, the tuffs of which the hills are composed are covered with a layer from 10 to 20 inches in thickness of a shallow water foraminiferal limestone...."

Just outside of the harbour we stopped for a few moments to take aboard a small boat load of fresh fish, just taken from the seines. At Isle Ronde we took aboard some oranges, but I was lying flat and feeling as though it was safer not to get up. It was not nearly as rough as going up. After leaning back and rounding the point it became quite smooth and I sat up for the last half hour. We arrived at 2 P.M. Found Ruth at home and had them send up a big tea at three. No more work today.

Forgot to mention that on the launch I met a Mr. J. C. Taylor, who had known Aug. Busch of the Museum on Carriacou in 1921. He asked to be remembered to him.

I-19-36

Sunday. Set aside as a day of rest. I feel well but a little tired. Spent quite a bit of time writing the notes on Carriacou and copying the map on page 37. Wrote a three-page letter to Ed and enclosed list of stations. Also did preliminary work on putting away more specimens. They are again piling up faster than I put them away, and I have to look spry to keep the proper data with them.

We listened via the radio to the dedication of the Theodore Roosevelt memorial building in N.Y.C. Remember seeing it, facing the Central Park, next to the American Museum.

I-20-36

Went again to collect on Saline Point, looking especially for *Termites*.

Station 150.

3 miles west of the town of Grand Anse, near the tip of Point Saline peninsula; and near sta. 131.

In dung took a large series of *Aphodius*, apparently at least 3 species; one *Coprinus*; a few *Sphaeridiinae*; one *Disterid*; two *Xantholininae*, four *Paederinae*, and many *Aleocharinae* (one species).

Termites were not scarce, but not many nests were large enough or accessible. The first one opened was just ready to swarm. Some of the *Termitid* forms did fly away when disturbed. No queen or royal chamber or guests were found. In the next nest were found about ten small queens and a few others that are apparently young queens. No guests were found.

This occupied the morning and I returned to town for lunch.

In the afternoon finished up notes, accounts, etc. Went to see the man who buys stamps and he promised to come over on Wednesday.

Spent most of the afternoon and evening fixing up and putting away specimens. It isn't finished even yet.

At 8:15 we heard on the radio the announcement ^{of the death} of King George VI, just before midnight in London. They did not use the old announcement "The King is dead; long live the King", though one of the American announcers did.

Ruth went riding with Mr. Jackson in the late afternoon, and in the evening played bridge with them, as she did the evenings when I was in Carriacou.

I-28-36 In the morning took a lunch and rode along the main road east of St. Georges, a little beyond Grenville, and returned the same route. Stopped first just south of Grenville at the beach. It is of black sand, but has some seaweed and much trash on it. Could not find any beetles. Next stop was Station 151.

One mile northeast of Grenville on Telescope peninsula. In dung took a large series. Of *Staphs*⁽⁴⁷⁾, many *Philonthus*, *Acy. S. lineae*, *Paederinae*, and *Allocharinac*. Also two species of *Aphodius*, the flat dirty *Leprinae*, one *Histerid*, and a few small *Sphaeridiinae*. Worked 1½ hours here.

On return stopped again at the beach. Found one *Cephus*, but it escaped. Could find no others, but it was high tide. Took a sample of sand for E.B. (1½ mi. s. of Grenville). Station 152.

Milepost 16 (from St. Georges) on road to Grenville. In fungus, took two or three specimens of a red *Allocharinac*, a large number of a small cylindrical beetle, many black mites, and a *pseudoscorpion*. A ♀ *Lampyrid* was resting on the fungus.

Stopped here for lunch in a cocoa patch, but there had been no recent tucking.

Photo #63

Station 153.

Milepost 10½ (from St. Georges) on road to Grenville. In freshly cut cocoa patch took 210 *Staphylinids*, including 15 *Coproporus*, 8 *Philonthus*, 165 *Bledius*, and 22 *Allocharinac*. Also 2 *Sphaeridiinae*, 4 *Cucujidae*, 2 ants, 1 other beetle, and 4 larvae.

In old blackened patch I found 13 of the flat *Piestinae* with long antennae, 5 ½ mm. beetles, 2 larvae, and 1 *Forficulid*.

Stopped on way home just above the town to take a photo of the larenage. Exp. 1/50 + 28.

Got home about 2:30, and found there had been some mail. The galley page proof of my thesis had come, and as there is a boat out at nine tomorrow, I decided to finish it by then. I found quite a few minor errors, and also a few omissions from the plates that could not be corrected. I'm going to list them here. Add on Fig. 1 F - *pta*, *cp*; Fig. 2 C - *senp*; Fig. 2 J - *mp*; Fig. 3 A - *sno*, *prnl*, *cxc*, *mb*, *scs*, *st* (mesothoracic), *acta*; Fig. 4 G - dash line for *epms*, *pwp*; Fig. 8 F - *cal*; Fig. 8 I - *cal*; Fig. 4 F - *pna*; Fig. 9 A - *peri*; Fig. 9 B or 9 C - *W. 9*; Fig. 28 E - *sp. 8*. Other errors are: *prson* Fig. 3 A should read *scs*; *scs* on mesothorax of Fig. 3 A should read *ses*; *actt* and *scit* are referred to in the text but ~~are~~ the parts are not shown in any figure (3 A or 4 F);

pus, postnotal suture is omitted from the list of abbreviations; pus on Fig. 4F should be pass. Worked on this till midnight.

I-22-36

Finished checking the proof and wrote the abstract for Biological Abstracts. As follows:
BLACKWELDER, R. F. Morphology of the ichneumonid family Stenophanotidae. Smiths. Miss. Coll. 94(13), 1-102. 30 figs. 1936. - A detailed discussion of the morphology of *Stenophanotus villosus* (Wes.) is presented, and a comparative study is made of the structure of 56 other species (including representatives of 25 tribes in 10 subfamilies). Special methods of preparation, some suggested changes in classification, and a bibliography of 117 titles are included. - R.F.B.
Put all this into the mail by 9:30. Couldn't register the proof but sent it first class.

While sorting correspondence and rearranging, I came across the two MS of my paper on *Tachyporus* and *Coproporus*. Decided to see if they couldn't be gotten ready for publication. The Part I. seems to be in good shape, and the part that I thought was unfinished now seems to be sufficient. I proof-read the whole thing again, and think I will send it to Ed. He intimated before that they might accept it for the Proceedings of the U.S. N. M.

In the afternoon I greased and washed the motor. A negro named Sandance helped me, but he didn't know much about it. I gave him the job only because he was so persistent. Today I felt like a change of work, so I wrote cards for both my MS, having the date & place of publication blank. It was great fun.
In the afternoon I wrote the monthly report to send to Ed, just for Trinidad. Ruth went out after tea to play tennis and bridge with Mrs. Jackson.

I-23-36

I-24-36

Rode around the southern part of the island to Grenville, then across to Laugane, and back. Found the road better than the Grand Etang road. Passes through nutmeg plantations, and is not bordered all the way by jungle like the other. Didn't stop till after Grenville.

Station 154.

About 4 miles west of Grenville on the road to Laugane. Tried sitting the rubbish under an overhanging ledge at the roadside. Found only some *Masixerones*, ants, and a roach.

Station 155.

About 6 miles southeast of Laugane on the road to Grenville. Under stones along a stream found ⁱⁿ ~~some~~ Staphs, including a small *Tachyporus* (3).

a *Pachyrhynchus* like a *Scaphrus* (?), a *Phylonthus* (?), and another specimen. Also two other small beetles and a bug nymph.

Station 156.

About 5 miles southeast of Guyane on the road to Grenville. Top of the pass. In dung found a large series of *Phacridinae*, two *Caprinae*, and several *Staph.* - including *Oxytelus*.

Station 157.

- A About 4 miles southeast of Guyane on the road to Grenville. In fungus on a log found three species of *Staph.* (1-5-2), one other beetle, and several ants and a *Forficulid*. Under stones at the edge of a small stream found three species of *Staph.* including a *Lathrodia* (?), what seems to be a *Quedius* (?), and another (?). In a large termite nest (*Nasutitermes*) found the large queen and soldiers and workers, but no guests.

Station 158.

About 3 1/2 miles southeast of Guyane on the road to Grenville. On a large solid fungus on a log found nine small round beetles & one larva.

Station 159.

About three miles southeast of Guyane on the road to Grenville. In fungus on a stump found a tiny slender *Staph.* (?), and several rare-beetle larvae.

Looked several times at decaying nutmeg husks but saw no insects in them.

Arrived home in time for a late lunch. After that I wrote a letter to the Smithsonian requesting the advance of \$1000 on next year's allowance. Won't mail it till next week. Went to the library with Ruth, but wasn't so much impressed. Started to read "The Return of Balldog Drummond", and brought it home. Read all evening too!

I-25-36 The following excerpts are from the Grenada Handbook for 1915. (not quoted verbatim)

Grenada is situated about 90 mi. north of Trinidad, 60 mi. northwest of Tobago, 18 mi. south-south-west of St. Vincent, and 100 mi. south-west of Barbados. It is about 21 miles long and 12 miles at greatest breadth, containing about 120 square miles. The central range, traversing the length of the island lies closer to the west coast; its high points are (Mt. St. Catherine) 2,749 ft., 2,300 ft., and 2,014. On the north-east, east, and south-east the mountains gradually slope off to the sea, but on the west coast the mountains run down to the sea.

The island is purely volcanic in origin, the only signs of upheaval being raised limestone beaches towards the extreme north. It is probably of somewhat older origin than the other volcanic West Indian islands.

Below from 700 to 800 feet elevation the valleys are principally cut in beds of volcanic conglomerate, tuffs, and ashes, frequently intersected by dykes of basaltic and andesitic lavas.

History: Spanish (1498), British (1609), Caribs (1609), French (1650), British (1762), French (1779), British (1783), French rebels (1795), British (1796-1936).

Catastrophes occurred as follows: Hurricane VIII-12-1768, Fire XII-27-1771 and XI-1-1775, Hurricane X-9-1780, Fire V-15-1792, Insurrection III-3-1795, Flood X-13-1819, Hurricane VI-23-1831, Cholera outbreak VI-10-1854, Flood XII-2-1866, Earthquake and "tidal" waves XI-18-1867, Flood XI-4-1875, Hurricane IX-21-1877, Riots XI-5-1885, Fire XII-21-1886, Earthquake I-10-1888, Flood IX-9-1889 and IX-28-1894. ? since ?

The year is divided into two seasons, - the dry one, from end of January to full moon in May. Average rainfall at St. Georges is 77 inches, but much higher in other parts.

The colony has the following island dependencies: Diamond Rock (Kick-em-Jenny), Islet Ronde, Les Remparts, Ile de Caillie, Tenara Island, Green I., Sandy I., Bird I., Constance I., Marquis I., Bacolt I., Adam I., Cahivigny I., Hay I., Honer I.; also Carriacou, Petit Martinique, Petit Tobago, Saline I., Frigate I., Large I., Mahauya I., Sandy I., Jack Adam I., in the vicinity of Carriacou.

Today is Saturday, and since Monday + Tuesday may be holidays on account of King George's funeral, decided to do some errands.

Had the camera case sewed up and filled with a new strap; also had a change made in the straps on the saddle bag. The man who did the job was anything but a fine leather worker! Left a roll of films to be developed. Made our reservations for the *Merissa* on the 30th. Went to the bank to cash draft and get bills that will be good in St. Vincent. Went to see the stamp man, and he promised to have some ready for us on Monday.

Put away specimens and wrote notes in the afternoon. Went to the library with Ruth in the evening. Started retyping Part II. of my revision of the *Tachyporinae*.

I-26-36

Tried to get started early but lost half an hour by forgetting my forceps. Went around the island to Grenville and then along the coast on a secondary road past Lake Antoine. My chief ambition was to get specimens of the *Cypius* that I saw a week ago but lost. Station 160.

Photo #64

About 7 miles north of Grenville, just beneath Lake Antoine. On the beach under rubbish and

searched, found several of the brown Carabids, some small weevils, several Anthicidae, and one or two ⁽²⁾ small Staphs. Worked here for nearly an hour on a fine wide beach of light coloured sand, but couldn't find a sign of any *Cafius*.

Station 161.

1/2 mile northwest of station 160. In cow dung found a considerable series of *Aphodius* (2 sp.), one *Philonthus*, and one *Pachyderma*. In a termite nest found only the queen, - no guests. There were also quite a few large ^{red} ants in one part of the nest.

I climbed up the 200 foot hill to see Lake Anlaine, which is said to occupy a cinder crater. The lake is nearly a quarter of a mile wide, surrounded by a single row of palms, and lying in the bottom of a round depression whose walls rise fairly steeply to a height of 50 to 250 feet. The lake itself appears to be nearly at sea level. Took a photograph from the highest point of the rim, looking southwest over the lowest part.

Exposure 25 & 22 (diaphragm may have moved to 25). From here I could see Carriacou and Union, but couldn't get a picture of them.

Returned through Grenville and stopped on beach at edge of town.

Station 162.

A 1/2 mile south of Grenville. Under seaweed on the beach found 2 small Staphs that appear to be *Bledius*.
B In increment found one *Onychelus* and one *Forficulid*.

Found a nice piece of coral to send E.B. and also took a sample from a cliff over the beach.

Station 163.

1 1/2 mile south of Grenville. Under seaweed found 2 *Cafius* and one large *Forficulid*. I had almost given up hope for the *Cafius*, but stopped again at the exact place I saw the one before (I-21-36). Right away I found one. Then a bunch of natives flaked around and after seeing what I was after, started turning up the whole beach. I saw another but it flew away, and then one of the boys found one and brought it to me. There are quite a few chickens always scratching on this beach, and I suspect they account for quite a few Staphs. The humor!

The boys were much interested in the motor. I talked with them for a while, demonstrated the reverse to prove it was one, and then came directly home without stops.

I-27-36

Spent the day inside, writing notes, rearranging papers, etc. It rained spasmodically all day. Finished book I started night before last. After tea went to see the man about stamps. Found he had washed and sorted all the stamps he had, but after quite a bit of figuring, I bought 2000 West Indian stamps and 350 Jubilee for \$10.00.

We got back some photographs, but were disappointed with the printing. Hope the developing was O.K. One negative was totally blank, but the other fine pictures seem to be first class. Wilfred, Effie, and others brought us stamps, some good, some bad.

I-28-36

Today was the funeral of King George. All day long the British station broadcast it, with organ music in between.

Put the big walking sticks from the alcohol tank into a box in cotton. Also put away more specimens from vials, and put the whole lot into the tank. The alcohol is pretty strong.

Wrote a letter to the Secretary of the Smiths, outlining our expenditures so far and asking for an advance of \$1000 from next year's allotment. It is to be sent to Barbados, care of the bank, and I think there'll be no difficulty in cashing it there, even though I won't be known before hand.

I-29-36

My birthday. No celebration however, just preparations for leaving. I packed the motorcycle in the morning, trying to do a much lighter job than last time, to prevent a repetition of the slight injury received before. Then went to Higgins & Co. if they wouldn't accept some responsibility in regard to the motor. The manager said there was no way to arrange such a thing. So I got the bills of lading and filled them out; also got a customs form.

Ruth meantime had packed most of the trunk. After lunch I packed the rest and we sent it off about 3:30. After tea I catalogued two numbers of the B. B. E. S., including Cooper's additions to the New York State list, and worked on specimens. Also paid Wilfred for the stamps he brought, gave him our address, and told him the prices we'll pay him, and what he can afford to pay. Ruth went down stairs to play bridge with the Jacksons, and continued the game after dinner. I packed the damage bag and my suitcases, and then went to bed. I had quite a headache, from eyestrain, I think. Too much bright sun, and poor lighting. I listened to Owen Hall on the radio, and didn't get to sleep till Ruth came to bed, sometime after eleven.

I-30-36

Got up earlier than usual and finished packing. After breakfast I went up to the Police Station to return the copy of the "Grenada Handbook for 1915" that the chief had lent me. He wasn't there. Then I tried at several stores to buy a socket wrench to fit the nuts on the motorcycle axle. No one even knew what I wanted. The garages apparently don't use them. Went to Huggins to pay for the motor-freight \$6.00, lightage \$3.00. The manager gave me a letter to the agents in St. Vincent, asking them to give the crate special attention. We gave Ronald, Effie, and the other maid their tips, and got Cromwell to take care of our bags for us. When we arrived they charged us \$6 for the luggage, but this time only asked 6/- I gave the boy that did the carrying 7/-, and Cromwell 1/-.

I left our forwarding address with Huggins, and Tooth wrote in the Hotel Guest Book. Mr. Jackson refused to charge me for the place he gave me to store the motorcycle, and was very anxious to have our good recommendations. Before we got into the launch at 10 A.M., I went to the Post Office, and found about 6 letters and 2 Registered ones. Two were from Tooth's family, one from Martha, Mother, & Raddy (for my birthday), and one from Pierig in Cuba.

Grenada 29, final.
Grenadines 1, final.

When we got aboard the *Merissa*, I took a photo of the northern part of the town. (Exp. No. 20). We sailed at 11 A.M. and we passed the northern end of Grenada during lunch.

As we approached the northern part of Grenada, the southern Grenadines came into view. First Isle Ronde - rather flat, with a smaller Isle de Paille at the south end, and the rugged Diamond Rock or Kick em Jenny (lay gun jinn) beyond; then Carriacou appears, with Union projecting from behind. After we passed Union, which appeared to be rather similar to Carriacou, we saw in succession: Mayaro, Canouan, Mustique in the distance but rather flat, Balisance - also in the distance and but steep and rugged, Isle du Rat, and finally Bequia - second largest of all.

Compared with the leeward side of Grenada or St. Vincent, the sea is quite rough through these small islands, as there is a clear sweep in from the Atlantic.

Took a photo of Union as we passed. I think the exposure was No. 22.

The channel between Union and Carriacou is about 14 fathoms.

Photo #65

We anchored off Kingstown, St. Vincent, about five o'clock. After asking the first officer - Mr. Dunette - to take special care of the motor, we came ashore in a row boat - 5/- for us and the baggage. The letter to ^{the} consul got us by the Customs without a moment's delay, and we met Mr. Davis from the Pelican Hotel, who escorted us to the hotel two blocks down the waterfront. The hotel was full but as five people were leaving on the Merissa, we could have a room later. I discovered that I had forgotten to mail on board the letter to S.I., so I had to go aboard again. After dinner we moved into the room overlooking the beach, - rather small but not as bad as might easily be.

I-31-36

Early in the morning I went to the Customs to see about the motorcycle and trunk. The clerk thought I could pay \$105 deposit on the motor, but I thought differently. So it was referred to the Treasurer, who decided I would not have to pay anything for a temporary visit. I went to the warehouse to get the trunk, and had it taken to the hotel. Then I went to the Chief of Police to inquire about licenses. He was very pleasant, but decided to talk to the Treasurer about it. The letter from the Administrator, which I showed

them, apparently settled the matter, and they decided to give me both licenses free, or more correctly to give me permission to use the motor without extra licenses. I then went to the warehouse again and unpacked the motor. The two front fenders had again come off, in spite of my extra care in packing. No damage apparently. This took all morning, and the afternoon was spent chiefly in unpacking and writing notes. After tea Ruth and I walked about the town, and found it quite different from St. George's. In the evening I wrote letters to the Société de Linnéenne de Guyane (who had sent me a bill for subscriptions!), Ben Frizzell, and Ferris.

Mrs. Davis, the manager of the hotel, told us their rates are 10/- per day. That seemed very high, but their reduction for monthlings brings it way down, - 4/- a month, and for that we can also have the small room next to ours.

II-1-36

I felt rather tired and very listless this morning. As my parent to drive has not arrived, I didn't go out at all. Copied Field Notes up to date, and figured out the following estimates of Staphylinidae collected so far. Jamaica - 400, Haiti - 400, Dominican Republic - 300, Puerto Rico - 1000, St. Thomas - 100, Guadeloupe - 500, Trinidad - 800, Tobago - 200, Grenada - 200, and Carriacou - 100. Total - 4800.

The following are the Staphylinidae recorded from the Lesser Antilles by Leng:

<u>St. Thomas</u>		
<i>Espeson moratus</i> Schaef.		<i>Cilea rufipes</i> Er.
<i>Thoracophorus brevicristatus</i> Horn		<i>Aleochara notula</i> Er.
<i>Trogophloeus flavipes</i> Er.		<i>Myrmecodoma munda</i> Er.
<i>Oxytelus insignitus</i> Grav.		<i>Homalota alternata</i> Er.
<i>Psariius eggersi</i> Bohn.		<i>Falagria infima</i> Shp.
<i>Lathrobium pectorale</i> Er.		<u>St. John</u>
<i>Pederomimus insularis</i> Bohn.		<i>Trogophloeus flavipes</i> Er.
<i>Philonthus vilis</i> Er.		<i>Philonthus hawaiiensis</i> Cast.
<i>Belonuchus minax</i> Er.		<i>varians</i> Er.
<i>Xantholinus attenuatus</i> Er.		<i>Belonuchus minax</i> Er.
" <i>rufescens</i> Er.		
<i>Leptacinus eggersi</i> Bohn.		

<u>St. Croix</u>	<i>Cryptobium centrale</i> Shp.
<i>Philonthus humilis</i> Er.	<i>fulvipes</i> Er.
	<i>Philonthus ventralis</i> Grav.
<u>Guadeloupe</u>	<i>nilis</i> Er.
<i>Pisatus capricornis</i> Cast.	<i>Cilea pulchellus</i> Er.
<i>fulvipes</i> Er.	<i>Aleochara taeniata</i> Er.
<i>pygmaeus</i> Cast.	<i>notula</i> Er.
<i>Anaeus exiguus</i> Er.	<i>Microstoda sperata</i> Shp.
<i>Lispinus faurei</i> Shp.	
<i>insularis</i> Foll.	<u>Martinique</u>
<i>Espeson crassulus</i> Foll.	<i>Paederus thoracicus</i> Er.
<i>euplectoides</i> Foll.	<i>Philonthus flavolimbatus</i> Er.
<i>nitens</i> Foll.	<i>Belonuchus hugnioni</i> Foll.
<i>Thoracophorus brevicristatus</i> Horn	
<i>ruficollis</i> Foll.	<u>St. Vincent</u>
<i>Amalium lachrymale</i> Fleut.	<i>Lispinus claviger</i> Cam.
<i>Trogophloeus croceipes</i> Foll.	<i>impar</i> Cam.
<i>coriaceus</i> Grav.	<i>Espeson crassulus</i> Foll.
<i>Oxytelus insignitus</i> Grav.	<i>Parasus skolitskyi</i> Bohn.
<i>Talaminus variabilis</i> Er.	<i>Thinobius miricornis</i> Cam.
<i>Stannoderus delaneyi</i> Fleut.	<i>Holotrochus smithi</i> Cam.
<i>Stilomodon connexus</i> Shp.	<i>Megalops smithi</i> Cam.
<i>Hypomedon debiliicornis</i> Wall.	<i>Stannoderus varians</i> Cam.
<i>Lithocharis dorsalis</i> Er.	<i>Echister duphthalmus</i> Cam.
<i>infuscula</i> Er.	<i>Stilobius jucundus</i> Cam.
<i>nilis</i> Kr.	<i>Aphomedon anthracinus</i> Cam.

<i>Melospiza cinerea</i> Cam.	<i>Silvius auripilis</i> Cam.
<i>Aeronautes melanotos</i> Cam.	<i>Stammodon varians</i> Cam.
<i>Scopaeus simplicicollis</i> Cam.	<i>Moneta personata</i> Cam.
<i>auripilis</i> Cam.	<i>Echidna waddellii</i> Cam.
<i>Cryptocercus marginellus</i> Bntr.	<i>impunctatus</i> Cam.
<i>Parus dominicus</i> Bntr.	<i>Silvius squatus</i> Cam.
<i>Philonthus varians</i> Er.	<i>Thalassidroma fucina</i> Cam.
<i>vestralis</i> Gray.	<i>smithi</i> Cam.
<i>Belonuchus caeruleus</i> Bntr.	<i>Melospiza cinerea</i> Cam.
<i>Xantholinus atrovirens</i> Er.	<i>Aeronautes melanotos</i> Cam.
<u>Musique</u>	<i>Lithocharis hirsuta</i> Shp.
<i>Pinophilus vermicularis</i> Cam.	<i>Scopaeus simplicicollis</i> Cam.
<i>Silvius circumflexus</i> Cam.	<i>montana</i> Shp.
<i>Echidna hypoleuca</i> Cam.	<i>angusticollis</i> Cam.
	<i>auripilis</i> Cam.
	<i>Cryptocercus fuscipes</i> Er.

Grenada

<i>Thalassidroma guadalupensis</i> Cam.	<u>Trinidad</u>
<i>Troglodytes smithi</i> Bntr.	<i>Lithocharis curvulus</i> Er.
<i>varicornis</i> Bntr.	<i>Xantholinus hydrocephalus</i> Tol.
<i>Parus shalickii</i> Bntr.	
<i>Thalassidroma melanocephala</i> Bntr.	
<i>miricornis</i> Cam.	
<i>Megalops humilis</i> Cam.	
<i>leucicollis</i> Cam.	
<i>Stenus lucens</i> Cam.	

In the afternoon while Ruth took a nap I took the motorcycle to explore the roads leading out of town. I went up the steep hill to Fort Charlotte, overlooking the town and bay as well as the Grenadines. The view is very fine, and the fort itself quite interesting. Over an arch is a plaque with the carved date 1806. However it appears to have been a little crudely superimposed on another number. The 1806 is rather fresh compared to the other.

I followed for a short distance the Leeward Road and then the Windward Road.

One of the most striking things about this town is the number of cripples. Many have lost one or both legs, and I ^{have} seen many deformities.

We went to Hazell's to see if there was any mail, but there won't be a boat till the 9th. Ruth went to the library (a Carnegie endowed) and brought back Beebe's - Beneath Tropic Seas. We are both reading it, rather critically.

After dinner we had a call from Mr. & Mrs. Hatch to whom Ruth had sent a letter of introduction from the Jacksons. They seemed very pleasant, and didn't stay too long!

II-2-36

Sunday. Spent the morning writing letters. These were to the Dr. ~~Edwin~~ Lyon, Ferrie, Don Triggell, Bierig, Miss Savarian in Jamaica. Butk was not feeling very well so I didn't try to go out at all. In the afternoon I read more of Beebe's book, and after tea we worked on stamps. Same in evening.

Beebe has rather overdrawn most of his word pictures, it seems to me. He must make everything seem weird and exotic, or at least unusual, and some of his similes are far-fetched and positively "feeble." He certainly exaggerates the chronicle of his trip to Furey. We were told by someone in Haiti that the MS for this book was written before Beebe ever made his trip, and while I don't believe that, I think it was largely drawn from imagination. He seems to describe himself in this excerpt:

"It is the custom nowadays to 'do' a city in a day, or a cathedral in an hour, or men to produce a volume of solemn critical comment after the most frightfully superficial observation. Some other passages are: 'The spider-like legs' of the diminutive (humming) birds are clad in scales, persistent memories through all ages of some lizardy ancestor. 'There are animal growths although they have no sex - in which they are lower than ferns -'

"... at last I saw the topsails of my schooner... I thought of a queen ant spiralling slowly to earth, and in the light of succeeding events I could not consciously have chosen a better simile. I watched a man lower a sail alone - Again the queen ant came to mind, for when she alights she ~~too~~ furls her wings, but it was not until a day or two later that the climax of the simile occurred, for then I watched the sailors... rolling up the huge sails and dropping them into the dark hold; exactly as I have seen the queen, after her marriage flight, twist and bend and hide off her wings....

II-3-36

Went back to the Chief of Police, and he gave me a permit to drive for a month, and also a small map of the island taken from a medical report. It was then too late to go out this morning. Copied the map onto page 73 and wrote more notes.

After lunch I rode around the southern end of the island for ten miles. The scenery is very different from anything I saw on Grenada. There are much more flat areas, and nearly everywhere the land has been cleared. Cotton is most common, and sugar cane second. One or two small pastures were all I saw in the line of collecting places. From Calliagua there is a fine view of Young's and Runermette Islands.

In the distance are Ballicum, Ballicum, and Bequia of the Grenadines, - also Mustique.

The road is not as good as those in Grenada, but is "pitched" most of the ten miles. Returned to Kingstown without finding a place to collect, though I spotted some carion that will be "ripe" in a few days.

After tea Ruth and I worked on stamps. In the evening I wrote the monthly report for Grenada, including lists of things taken and the estimates of number of Hymenoptera taken on each island.

II-4-36

Rode around the southern and eastern sides of the island, passing through Calligua and Georgetown, to Sandy Beach, three miles north of Orange Hill. This is the end of the road.

South of Georgetown the eastern part is all cleared and mostly planted in arrowroot. North of Georgetown it is mostly coconuts. The road is unimproved after the ten mile part, and beyond Georgetown in scarcely a road. Didn't see a single good place to collect till I got to the end of the road.

Station 164.

Sandy Beach, 3 miles north of Orange Hill Estate, on the north-east coast, about 8 miles north of Georgetown. On the beach found one dead

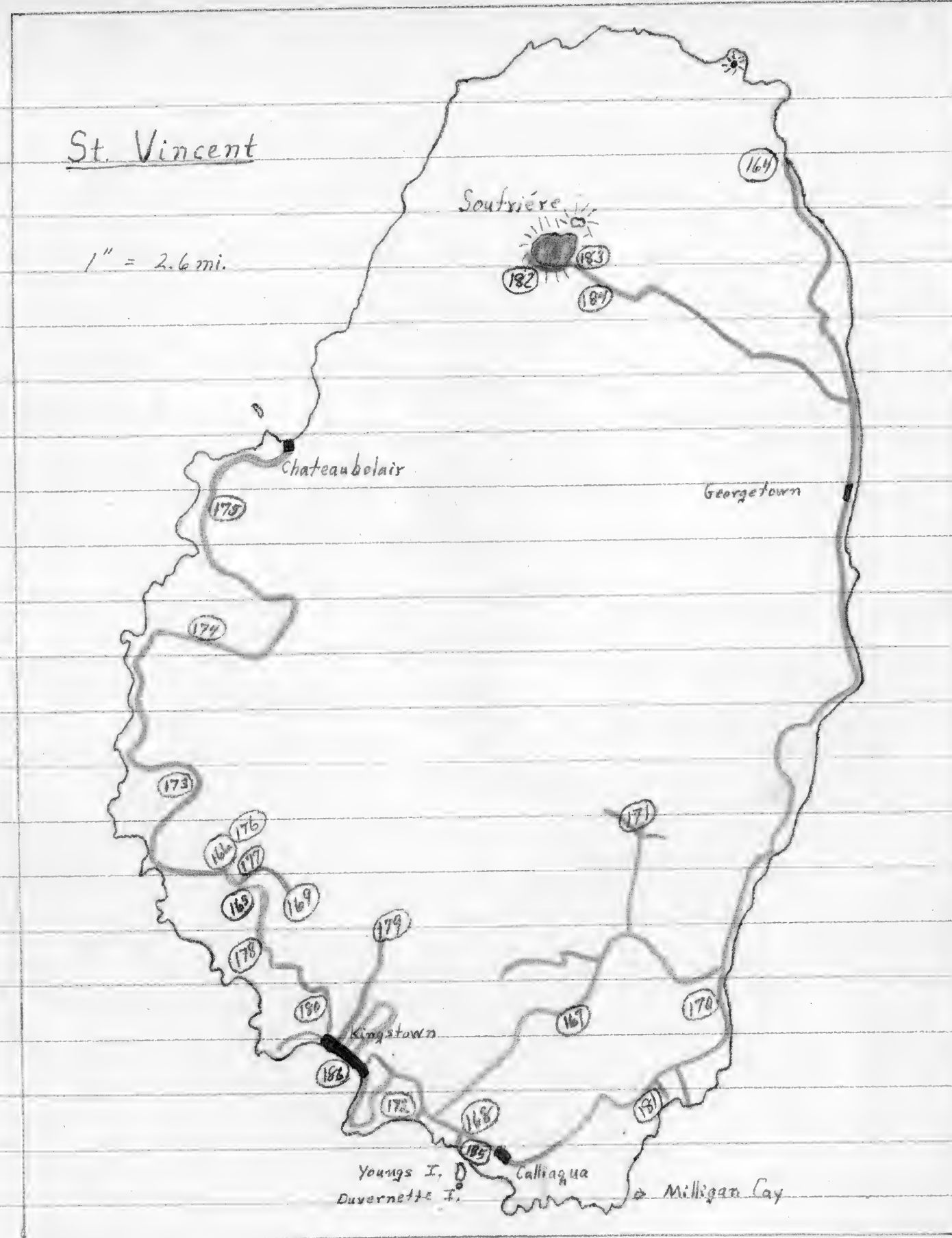
Nabobates, 13 Carabids, and 5 larvae. There was very little seaweed and no Staphs. Including found 4 Cynipids, 15 Cypriids, 39 Aphidinae (37-1-1), 1 Histerid, and 1 Sphaeridiinae. For the result of a day collecting this is very feeble, to say the least. The beach was a fine wide one, but of very black sand and very exposed. More extended collecting including was prevented by an approaching rain. I had to get back to a decent road for fear of getting stuck. About 2 miles north of Kingstown is the Dry River which runs through what is called the Lava Bed. I was curious to see it, but found it to be merely a flood-plain of the river formed of black or gray volcanic materials and dissected deeply. Took a photo to show a layer of more shaly eroded material about two inches thick that ran throughout the area. Took a small (Cap. 1/25-11) sketch for the thick layer of gray ash that is said to cover all this area, but saw nothing very striking in place of the supposed growth of Georgetown. There was a grey gravel something at least appearing to be washed down. Took a sample from road cut 4 mi. north of Georgetown. (Lepidoptera)

Photo # 67

On the way home ran out of gas (main tank only) and had to go back for miles to the garage. No other gas on this side of the island. The man at the garage told me that natives bring their bikes from the west coast by the Soufrière "road" and return the same day. It must be about 12 miles across. When climbing the volcano from the east one must walk about four miles.

Home for tea, and after putting away specimens, went with Ruth to call on the Hatchis at the Rectory. Had a nice visit, and also a glass of sorrel, a native fruit-drink made only about Christmas time. Found out that Grafton Hazell is the one that owns the "yacht," and he goes to Bequia every week-end.

Mr. Hatch told us that St. Vincent is a much poorer island than Grenada, and the natives not nearly so well off. There is no peasant proprietor or middle class here, — only the rich whites and the poor blacks. The negroes here are little better off than in the time of slavery, for there is no one responsible for them now. There is no social mixture here as there is in Grenada between the blacks and whites.



II-5-36

Spent the morning on the motorcycle. Removed both heads and found a lot of carbon, especially bad in the rear cylinder. After lunch took out time to write to Ed and send the MS. This took so long I didn't get back to the motor till after

Sea. Then I replaced the heads, adjusted valves, and started it up. One cylinder was very weak, the other one. It got too dark to work any more, but I cleaned the carburetor and decided to put in two new spark plugs tomorrow.

After dinner Tuth and I went to the library. I copied the following notes from the Handbook of St. Vincent for 1914.

St. Vincent is 68 mi. north-north-east of Grenada, and 21 mi. south-west of St. Lucia. Its length is 18 miles, its greatest breadth 11 mi, and its area about 150 square miles. Kingstown Bay is the largest coastal indentation.

The island is mostly mountainous; on the windward side there are old terraces or benches of marine erosion which form a rim of level country along the coast; on the leeward side the land slopes steeply to the sea. The highest elevation is Soufriere (4048 ft.). In the central ridge are Grand Bonhomme (3198 ft.), Morne Rame (3520), and Richmond Peak (3528). The form of all these indicates that they have suffered prolonged and intense erosion. Though of volcanic origin, none of them shows a crater or a well-preserved cone. A series of radiating valleys, very deep and narrow, has been cut into the old volcanic pile, and between these are high steep-sided spurs, the summits of which are knife edges often only broad enough

to serve as a footpath. In the recent geological history of the island erosion has been of vastly more importance than accumulation.

The whole of St. Vincent is of volcanic origin. There are no marine sedimentaries, and no organic limestones. Lava flows are far less important than the ash beds, but are frequently 40 ft. and sometimes 80 or 100 ft. thick, and some are nearly a mile in length.

It is the alternation of ash beds with columnar-jointed lavas which yields under the influence of sub-aerial erosion St. Vincent's famous scenery.

II-6-36

Put the two new spark plugs in the motor hoping it would make the rear cylinder work better, but it didn't make any difference. So I took off the rear head again and ground the exhaust valve. When I got it open I saw that the piston has been taking oil, and this was probably the cause of the excessive carbon. The grinding improved the look of the valve surface, but didn't help the performance of the cylinder. I couldn't think of anything else to try.

It was 10:30 by now, but I started out along the Seeward Road north from Kingstown. The hills are very steep, with frequent jagged cliffs, and the vegetation not very dense at any point and frequently rather sparse.

Station 165.

Hillside overlooking Pembroke Estate in the Buccament Valley, about 5 miles north of Kingstown. In saw dung I took ~~125~~ ¹²⁶ Staphs (Ptilonthus-2, Cryptochus-108, Mocharinae-1), 3 Sphaeridiinae, 32 Aphodinae, etc.

One of the workmen came by to see what I was doing, and stayed for some time to help. I arranged with him to spot some wood-bore nests and show them to me on Sunday next.

I rode on a short distance past Rockland Hill Village and returned to the Buccament River.

Station 166.

Near highway bridge over the Buccament River, about 6 miles north of Kingstown. Under stones along the river found 30 Staphs (Pseudos-3, Tachropia-1, Pterodinae-4, Mocharinae-22), ~~3~~ ³ Carabids, 7 hemispherical beetles, etc.

Took my lunch here before I started collecting, and came home afterwards through a light rain without stopping again.

Spent the rest of the afternoon and evening washing and sorting stamps and reading Liberty. I've been rather surprising myself lately by liking most of Bernard Mac Fadden's editorials. I don't know why I didn't expect to.

II - 7-36

In order to test the spark coil of the motor, I reversed the spark plug leads. No improvement or change. I'm now convinced that the trouble is loss of compression due to leaky piston rings, and this accounts both for the oil above the piston and the excess of oil in the chain case. I'll write to Harry Lyon for new rings and try to find someone in Barbados to help me install them.

After lunch rode along the Vigie Road to Akers and the Marriagua Valley, joining the main road about one mile north of the Yambou River, or at the 10 $\frac{3}{4}$ mile post. This country is rather densely populated and almost entirely cultivated. I stopped and climbed several hills, from which a wonderful view was had, but no places to collect.

Station 167.

Four miles from the main road at Kreakhead Bay on the Vigie Road, county of St. George. A steep hillside overlooking the Marriagua Valley. In saw dung found nothing but 3 Coprinae.

Might be able to do some collecting along the Yambou River, either at its mouth or about a mile up the northern branch. The roads in this area are very poor but more plentiful than in any other part of the island. Sugar cane and cotton are the chief crops.

We went to dinner with the Halls at the Rectory. It was fast day but we hardly lived up to it. I was feeling very lousy with a queer sort of stomach-ache, but it didn't get any worse after eating. Mr. Hatch told some of his experiences in South America, etc.; and we played Pit for a while. They drove us home about eleven.

II-8-36

Went out in the morning to work in a pasture just this side of Calligua. I think it belongs to Ormond Hazell.

Station 168.

Three miles southeast of Kingstown, near Calligua on the southern coast. In saw-dung took 254 Staphs (*Oxytelus*-220, *Xantholininae*-8, *Paederinae*-1, *Philonthus*-3, *Allocharinae*-21 and 1), 10 *Coprinae*, 42 *Aphodius*, 17 *Sphaeridiinae*, and 1 other beetle.

I went down to the beach but it was margined at the water's edge by a coral reef, and had no seaweed or drift. Came home for lunch.

Spent the afternoon writing this journal, copying field notes, etc. In the evening tried to think up an article on Guadeloupe for Ruth to send to the West Indian Review. Finally hit upon the theme of "Contrasts", thinking of the two islands, churches & shrines, buildings, the cheerfulness of the people, etc.

II-9-36

Sunday. Ruth went to church at nine o'clock, but I went out to keep my appointment with Victor Williams at Pembroke Estate. I found him waiting, and we walked about a mile up the valley and climbed about 400 feet to get above the cultivated area into the bush. He had spotted one or two *Termite* nests and we found several more. This was at Station 169.

On hillside overlooking Sta. 165, near Pembroke Estate on the Buccament River. In the first nest of *Termite* we opened, we found the queen and some large black ants, but no guests. In another I couldn't even find the queen. In the third again no queen but I took a good series of the tiny pale insects, and one large *Myriapod*. Under a small stone beside a spring was a nest of minute red ants with several larger white bodies (queens??).

These nests were all of *Nasutitermes* sp., but all differed from those found in Grenada and Trinidad by not having a woody hard area around the queen cell. Several other nests were found but they were only partly occupied. Frequently also there were large numbers of large red ants occupying part of each nest. Some were taken ~~from~~ ^{from} the third nest mentioned above.

Ruth had a bad sore throat this afternoon. I stayed home and spent the afternoon on notes and accounts and in reading.

II-10-36

Rode across the southern end of the island to the mouth of the Yambou River. Milepost 9 $\frac{3}{4}$. Station 170.

A The Yambou River on the southeast corner of the island, $\frac{1}{2}$ mile above the mouth. Under stones on a large sand and gravel bar found 52 Staphs (Coproterus-1, Tathrodia-7, Pseudorinae-5, Onaliniac-6, Stelici-3, Aleocharinae-30), 3 Carabids, 3 Aphodiinae, 18 small hemispherical black beetles, etc.
B Under dung on a bluff back 3 Caprinae, 2 Aphodius, and 1 larva (wireworm).

On a bluff across the river I could see an interesting-looking shrine. I couldn't get across to it and didn't have the camera.

Speaking of the camera, our last batch of pictures were all spoiled by a white spot in one corner. I finally found the cause to be long hairs in the bellows, worn by the finder which was slightly out of line. I patched the bellows with surgeon's plaster and corrected the finder. Think it will now be OK.

After lunch I went to inquire about transportation to the Grenadines. There is a daily

ship to Bequia and a weekly one to the other islands. The possibility of chartering a boat ~~is~~ better on Bequia. Mr. D.C. McIntosh here can probably give me information about this and a place to stay in Bequia. He has a brother Cyril on the island also. Mr. Spence at the Treasurer's office is in charge here.

We got a little mail today. It came on the American-Caribbean S.S. Scanpenn on its return trip from Trinidad. They don't stop here on the way south.

Ruth is reading Anthony Adverse. Progress is very slow and I think it will keep her quiet for several weeks.

II-11-36

Intended today to ride up the Leeward Road to Chateaubelair. It rained hard last night and again early this morning and looked exceedingly black over the mountains. So I changed plans and rode around the south end to the key-milepost, then into the interior along the Yambou River to Mesopotamia. From here I turned to the north for about two miles to the top of the ridge.

Station 171.

Two miles north of Mesopotamia in the valley of the Yambou River, parish of St. George.

In dung in a small yam field took 3 Staphs (Xantholininae-1, Aleocharinae-2), 1 Sphaerodiinae, and 43 Coprinae.

Returned along the same road (not an auto road) to Mesopotamia. I stopped at the Police Station to look at their map. It shows lots of roads that aren't on my map. Then I started back through the Marriqua Valley, intending to take a lower road through Gomez. This road soon turned into a foot path but I followed for about two miles. It ended in a very steep half mile hill, exceedingly rough. Rather than strain the motor when it isn't working very well, I decided to go back. On the way back I stopped to speak to some men at a little store where I had inquired the way coming up. One of the men was evidently drunk. He practically "told" me to come in for drinks. I said I didn't want a drink, but he said they would have them on me! I merely laughed and drove on down the rough trail. He was still swearing when I got out of hearing and I really expected him to try to follow. Judging from his looks and actions, I was lucky not to have stopped the motor. He looked like a very light "half-breed", with the usual bad characteristics.

Returned home over the Ligie Road without finding any other place to collect. Arrived just in time for lunch though I had taken my lunch with me. After lunch I went to the Post Office and got two letters for Ruth. One of them apparently arrived yesterday and the other came today on the S.S. Lady Hawkins.

Then rode out 2½ miles toward Calligua to a pasture just below Lion Hill along the Greathead River.

Station 172.

Along the Greathead River, about 2½ miles south-west of Kingstown. In dung took 68 Staphs (Oxytelus-34, Paederinae-1, Xantholininae-21, Philonthus-1, Tachyporus-1, and 2 spp. of Aleocharinae-2+4), 5 Histerids, 84 Aphodius with 5 larvae, etc. This is the first Tachyporus I've taken on the trip, if it really is that. When I caught it I thought it was a *Tucoparyphus sulphoides*, but it's not that. It may be another species of *Tucoparyphus* (Lill). All the species of this genus recorded by Long from the West Indies are really *Coproporus*.

Two women today asked me my name. Knowing they'd never get such a long one, I told them it was Jones! One returned that she was Miss Jackson.

After tea I mounted specimens and wrote up notes. In the evening I tried to work on the Guadeloupe article, but Tooth didn't seem to appreciate the results.

II-12-36

Decided to inquire further about transportation to the Grenadines. I went to see Mr. Spence at the Treasury. He said that the government launch visits Bequia, Carriacou, Mayaro, and Union, but no others. A small sloop might be chartered in Bequia for \$6 a day, or a fine little auxiliary sloop here for about \$12 a day. These are the only practicable means of getting to Mustique. By a slight rearrangement of the schedule, which would probably be authorized by the Administrator, I could leave here Thursday morning on the government boat, reaching Union in the evening. Friday would be spent on Union, Saturday a side trip to Carriacou and Sunday return home with a short stop on Mayaro. On the 26th of Febr. the doctor is going to Bequia on a special trip, going over in the morning and returning in the evening. I could probably get permission to go on that trip too. Water can always be gotten on board, but food must be carried for the trip. Stay at Rest House on Union.

Photo # 69

I intended to go out this afternoon, but instead I proof-read the final copy of Part II of my Revision of the Parhyssarinae. I'll have to ask Ed to check three or four items in the Junk Catalogue and to look up two characters on the specimens. I won't write him about it till I hear about Part I.

After tea I read a continued story in Liberty to be continued in our next batch of mail! The Harrison line S.S. Ingoma was in port most of today. Just at dusk, 6:30, I took a picture from our window looking out over the bay. Exposure 7 + 12 sec. This was third on the roll. The first one only should have been fogged in the lower left hand corner. Just remembered that I forgot to record the picture before this one. It was taken of a vine-covered tree trunk near station 171. Exposure 1/25 + 8. (?)

Also wrote list of station numbers & localities. After dinner we listened till after ten to radio. Pres. Hoover was to speak at eleven but it wasn't a good night for reception so we didn't stay up for it. European stations come in better than American ones on such rainy nights as this.

II-13-36

At breakfast time this morning we watched a four-masted schooner come into the bay. Unfortunately her sails were furled and she was using her auxiliary engines. She is an American ship - called a yacht here.

Photo #70

Traded up the Leeward coast through Layou, Barrouallie, and Traumaka to Chateaubelair. The road was still wet from the early morning rain and it drizzled every half hour till after lunch. Beyond Barrouallie the road is seldom travelled by cars. It is steep and narrow, and has very sharp turns. The scenery is very similar to that of Grenada, though there is more cultivation.

Station 173.

1 mile northeast of Layou Village, about 3 miles south of Barrouallie, on the Leeward Road. A large bug in the road.

First chance to stop was just beyond Barrouallie, when I thought I was at the end of the road! It was actually that bad.

Station 174.

2 miles northeast of Barrouallie, along the Wallilapau River, about a mile above its mouth. Under stones along the stream took 11 Staphs (Psephenidae - 1, Aleocharinae - 2 and 8).

Beyond Traumaka which is on a ridge, the road is very steep and rough. Had less trouble going up hill than down, however.

In Chateaubelair I stopped at the Police Station to look at their map. It was so old and worn that I couldn't use it. The Sargant explained that they had to keep it no matter what its condition because it was on inventory. He seemed quite puzzled when I told him I am a "Doctor of Philosophy." I told him of my experience the other day with the drunk, and he said the fellow is no serious - named Bradshaw. He thought there was a map at the school, and as I couldn't very well get out of it, I went over to see. It turned out to be a hopelessly coloured outline made by a teacher, - (fourth grade, I should say).

As the "road" goes only a short distance farther and the mountains were hidden in clouds, I started back, hoping to find a few more places to collect. The streams are generally rather monopolized by the washer-women. They spoil the collecting for quite a distance on each side of every bridge by kicking up all the sand bars and moving stones to make little dams.

Station 175.

Just south of village of Traumalka, about 2 1/2 miles southwest of Chateaubelair on the Seeward Road. Under dung in the road found 35 Staphs (*Oxytelus* - 14, *Xantholininae* - 6, *Philonthus* - 2, *Aleochara* - 3, *Aleocharinae* - 9 and 1), 3 *Aphodius* (1 and 2), 21 *Coprinae*, 1 *Sphaeridiinae*, and 2 *Histerids*. These *Coprinae* include both the convex shiny kind and the flat dirty kind, often from the same short tube under the dung. Perhaps they're the same species. (?)

From the top of the large ridge between the Wallilaban and Cumberland Rivers, a fine view can be had northward, including the Soufrière. I stopped here to take a photo (Exp. No. 18), and to catch lunch. There is a small amount of cocoa grown around here, but none has been cut recently and the crop looks very poor.

In Barrouallie I stopped at the Police Station. Their map shows many names and roads not on my map. Not very up to date though.

As I crossed the bridge over the Buccament River I was hailed by Victor Williams! I stopped to talk for a few minutes, and then came on home in time to take a shower before tea.

Ruth got a few stamps (70±) from the houseboy.

II-14-36

St. Valentine's Day. Stayed home to work on specimens, notes, etc. A boy came with several hundred stamps, and we bought them all. Worked on them in the afternoon.

After tea Ruth and I walked along the road overlooking the bay on the south, - about a mile. Rode along the Seeward Road to the Buccament Valley in the morning.

II-15-36

Station 176.

Same as sta. 166. Along Buccament River.

A Under stones along edge of stream found 67 Staphs (*Lathrodia* - 49, *Staphylininae* - 2, *Paederinae* - 3, *Aleocharinae* - 13), *Aphodiinae* - 2, hemispherical black beetles - 11, etc. Under dung found 41 Staphs (*Oxytelus* - 29, *Xantholininae* - 6, *Aleocharinae* - 6), 63 *Coprinae*, 10 *Aphodius*, and 1 *Sphaeridiinae*.

These six *Xantholininae* are very large - over 1/2 inch long. This is the first time I've seen any of them since Guadeloupe.

Another boy here in the hotel brought some stamps. There were nearly 600, but no Jubilees. He had some of the latter but wouldn't sell. Ruth finally took the whole lot for 4/-.. We spent most of the afternoon and evening washing and sorting and packing.

Station 177.

Pembroke Estate in the Buccament Valley. Victor Williams had saved for me some pieces of mango wood with larvae in them. Only one was still a larva but I found also one live cerambycid.

Station 178.

4 miles northwest of Kingstown on the Seaward Road. One large bug in the road.

II-16-36

Sunday. Got up rather late and decided to make this a vacation day. After breakfast we went for a walk, following the Eastern road to the pass at Richmond Hill and then out onto the Cane Garden Point. From here we got a fine view of Young's Island and Fort Limerick; also the Grenadines. In the other direction were the town, Fort Charlotte, and the exceedingly rugged skyline in the background. Took a photo showing Young's Island, etc. (Exp. 50 + 17).

Photo #71

We passed the ruins of an old sugar mill, but saw no fort or other works. The remains of a nice stone house which has been completely gutted by fire was conspicuous.

After lunch we worked on stamps, and in the evening listened to the radio.

II-17-36

Went to see Mr. Spence at the Treasury again. My plan was to see if the private boat he mentioned before could be chartered for two days at a reasonable price to take me to Miquique and Carriacou. He phoned Mr. de Freitas, the owner, but didn't get him and left a message for him to call me. I waited all day and received no reply, and found from the phone book that there are two de Freitas's here!

After tea Ruth and I went walking up the valley behind the town.

II-18-36

Tried to go to see Mr. de Freitas about his boat, but I found his house and office empty. Mr. Spence was also out, so I was up a stump. About eleven o'clock Mr. de Freitas sent his clerk to talk with me, and I told him the situation, formal, financial, and temporal. He said he would talk to Mr. Fred Hazell, part owner, and call me later. When he called just before lunch he said the expenses of the boat made it necessary to charge \$15 a day. We had already ^{agreed} that that was more than I could pay so decided to let it drop. He made some other suggestions as to how I might do the same thing much more cheaply.

After considering the advantages and the

disadvantages, I finally have decided not to try to go to the islands at all. Instead we will leave for the Morass on the 25th as originally planned. The next boat is two weeks later, and we run the risk of getting stuck in Martinique for 7 weeks.

After lunch I rode up a trail north east of town for a short distance. Tried to collect along a stream but it was too overgrown. Station 179.

1½ miles up the North River, northeast from Kingstown. Inching found 34 Staphs (*Oxytelus* - 24, *Xantholininae* - 1, *Allocharya* - 4, (2 sp. of) *Allocharyinae* - 5), 6 *Coprinae*, 2 *Aphodius*, 3 *Sphaeridiinae*, 6 *Myriapods*, 1 *Thrips*, and 1 ant.

This area is all cultivated, except for a plot here and there in which a row is left.

Went back to town and out along the Leeward Road a short distance.

Station 180.

About 1 mile north of Kingstown on the Leeward Road. Inching found 104 Staphs (*Oxytelus* - 4, *Psepheninae* - 1, *Silbi* - 2, a large *Xantholininae* - 2, a small of same - 4, *Allocharyinae* (4 sp.) - 91), 2 *Coprinae*, 37 *Aphodius*, 2 *Sphaeridiinae*, 11 *Histerids*, 10 *Torriculids*, 12 ants, etc. One bug flying.

The view from Sta. 179 is exceedingly fine, and the air especially clear today. All the Grenadines were very clearly visible, even to Carriacou. Grenada was also plain in the distance, to my surprise. It is 68 miles south-south-west of St. Vincent. The ones visible were Bequia, Ballicoune, Barbouia, Mustique, Canouan, Union, and Carriacou.

I think the Grenadines would make a good subject for a summer's trip sometime. Two months should be enough, - 20 days enroute and 40 down here. Might hire a sloop of fair size and equipment for a month and visit all the islands. I figure that this could be done for \$1000, for two people.

II-19-36

Photo # 72
73

Rode out to the 9½ mile post on the Windward Road. Walked up the south bank of the Yambu River to the shrine I saw the other day (p. 80). It turned out to be a very simple outdoor chapel. A three-foot image was placed in an arched masonry niche about eight feet up on the cliff. Beneath was a large flat altar, - about three by seven feet, supported on numerous slender pillars. In front of these were a few low masonry benches. A passing native told me that

it was built last year by the minister of the large church across the valley. Roman Catholic. Services are held both places every Sunday, and are especially impressive at moonlight. A large crowd attends. The island surrounded closely by cane fields. I took a photo of it. (Exposure 1/2 and 9).

The river was so lined with washermen that I couldn't call it, as I should. back. At the southeast corner of the island I climbed a hill to examine some extensive ruins and get a view southward. I learned from a native that the ruins are the remains of a large estate house destroyed by the hurricane of 1798. I took a photograph of the ruins from here. (Exposure 1/2 and 25).

After lunch I returned along the same road to araggling pasture.

Station 136

Milepost 3.2 on Northwest Road, near the south-east corner of the island. In dung found 56 Staphs (Coryphus-1, Aleocharinae-55), 33 Cephinae, 6 Aphodius, and 7 ants. This is a large pasture but dung was scarce and only the Aleocharinae in evidence (of Staphs).

Decided to climb Soufriere tomorrow.

II-20-36

Up early today and got away by 7:30. Schedule was to climb Soufriere from the East. Rode to Georgetown where I stopped at the Police Station; just to let them know and ask about the trail. Arrived there at 8:30, and then went on across the Dry River, turned left and rode up through the palm groves for about two miles to Lot 14. Here I left the motor and started to walk up the trail. A native seemed quite perturbed that I was going alone, and said I was very brave! The path keeps to the top of the ridge north of the Dry River, frequently so narrow there is scarcely space for two donkeys to pass. This is not obvious because of the thick growth of tree ferns and bamboos along the precipitous slopes. This is the nearest to being tropical forest of anything I've seen on this island, but it's not "drifting forest" like that on El Yunque in Puerto Rico.

Photo II 74
#76, #77
#78

Within a half mile I passed the last sign of human beings, and at one mile reached River Bed. Here the path crosses the main branch of the Dry River - dry, of course. The channel gives the impression of having carried a tremendous volume of water during the rainy season.

From here the path again follows a ridge, gaining its summit at about the limit of trees (about 1500 feet on this side), and then following up the narrow crest to the top of the mountain. The path is steep and very rough, being covered in most places with cinders and ash. I couldn't find anything light enough to be sure.

Two large flat hills cap the mountain as seen from the path. These are remnants of lava flows—many successive ones. One of them has been sectioned by weathering and at least a dozen separate flows can be seen, some longer than others and flowing down over their ends. If there were ever any extensive flows on this side of the peak, all signs have disappeared.

Recent streams have deeply channelled many of the slopes. The hills look brown in very striking contrast with the mountains to the south which are densely forested. Here the only vegetation consists of small plants which form a thick mat over the ground, and occasional stunted tree ferns.

As I climbed up to the saddle between the two lava hills, I expected to see the

actual peak beyond. Instead I looked down into a blue lake about a thousand feet below. The crater has nearly perpendicular walls all around, but these are much higher on the north-east side. The lake must be about a half mile in diameter, and has been several feet higher at some time, as there is a mark all around. The lowest point of the rim (north-west) seems to be filled with a lava flow. I walked for some distance around the crater rim, and ate lunch. I reached the top at 11:15. The highest point is not on the crater but to the north. The so-called Blue Crater is over there, but the approaching fog prevented my going there. Georgetown and Chateaufort were both plainly visible, and Grenada and the Grenadines were in the distance.

Station 182.

The south rim of Soufriere, St. Vincent. Elevation about 3900 feet. A queer looking small centipede found dead on the ground at the very brink of the crater. Each segment of its seventeen or so. has two lateral expansions that triple the width of the creature. No beetles were found, only grasshoppers & hoppers.

On the way up it had rained lightly for half an hour, enough to soak the vegetation and my boots. My clothes were thoroughly wet with perspiration before I got up to the open ridge where the breeze was very welcome. Clouds hid the higher mountains when I started. But by the time I reached the top it had cleared off and was unusually clear for this peak, as I'm told. By twelve, however, my special time seemed to be over, as the clouds rolled in again and the peak was hidden from view all during my descent. I took photographs of the mountains to the south, 4 (exp. 1/100 & 1/16), three of the crater (one double exposure, second 1/100 & 1/12, third 1/100 & 1/11), and then started back. Just below the rim I found a few "bugs" under "moss".

Station 183.

200 feet below the south-east rim of Soufriere; 1/2 mile east of sta. 182. Under the matting of small plants and roots found one myriapod, an ant, and an isopod.

Station 184.

1/4 mile southeast of sta. 183, several hundred feet farther down the mountain. Under stones in a dry creek bottom took 2 Carabids and a spider.

I picked up a sample of cinders and one of ash from the rim of the crater and one or two other pieces a little farther down.

From a distance the top part of the mountain seem to be without vegetation, but actually they are covered with a mat of tiny yellow-brown plants, and there are occasional small tree ferns. The inside of the crater is quite green where the steep slopes are not covered with slides and talus.

The descent was uneventful. I was very glad I had boots, because of the thick cinders. I was getting somewhat thirsty and soon developed a blister on one toe. I got back to Georgetown in 1 3/4 hours from the top, reported to the Police Station, took a photograph of the Public Library, and came home in 1 1/4 hours more. I didn't feel very tired, though my eyes were a little tired from the sunlight.

II-21-36

Was quite sore and stiff this morning and felt like little but sitting around and reading. Did manage to label the specimens of the last week. Mail was due today but we got none. At the post office I talked for a few minutes to a man who has been up Soufriere several times. He told of a party of four fellows who swam

across the lake some time ago. The other side was so precipitous they couldn't climb out but had to return unrisken. One of them gave out on the return trip; with the help of an inflated tire tube the other three got him to shore and practically carried him up to the rim. Here he passed out and was unconscious for 7 hours. The mountain is less accessible now than before the 1902 eruption. Horses could be ridden to the top then, and there were trees much higher on the slopes. The lake is reputed to be bottomless, at least it is said that an attempt to sound it failed to reach the bottom!

Men often walk from Chateaubelair across the top of the mountain to Georgetown with fish barrels, and return the next day. This is comprehensible, but over that upper six miles of spindlers they walk to hard work!

II-22-36

Still feel rather sore and somewhat lazy. About all I accomplished was the starting to pack a box of cards, books, etc. to send home. Meant to start work on the motor, but didn't. Ruth bought a few more stamps from the house-boy. Spent the evening making a scale diagram of a quilt pattern for Ruth. It probably won't be overworked.

At eleven o'clock the Hatch's came by and took us swimming to the beach opposite Young's Island. While we were there we ~~also~~ saw some "sea-eggs". They are sea-urchins. A large white species with 1-inch spines, and a much smaller black species with spines up to 6 inches in length. The latter are more feared.

II-23-36

Sunday. Ruth went to church at the cathedral, and I went collecting near Calligua. *Sardinia* 185.

3 miles south-east of Kingstown, along the main road, 1 mile west of Calligua. In a different part of the same pasture as sta. 168 found 287 Aphids (*Acyrtus* 87, *Cryptellinae*-1, *Praederinae*-2 and 5, *Xantholininae*-14, *Phylloxera*-1 and 1, *Alocharinae* (small spp.)-170, 6 Hymenoptera, 130 Aphidius, 6 Sphaeridiinae, 14 Forficulidae, 1 Centipede.

In a stump found a few *Termite*.

Photo # 79

After tea Ruth and I walked up to Fort Charlotte, about 2 miles, overlooking the harbour. We took a photograph of the bay (exp. 1/5 + 8), but it was too late to take any more because ~~to~~ we had no tripod or other support.

II-24-36

Hazell & Co. say that tomorrow will be soon enough to pack the motor, so I'll leave it till then. Ruth wanted some photos taken, so I rode up to Fort Charlotte. Took one of the archway entrance to the fort, and one of the runway.

Photo # 80
81, # 82
83.

On the way down took one of the Public Library. I didn't record the exposures of any of them.

Packed the box of books, filing cards, & clothing to go back to Washington.

II-25-36

A very busy day to make up for yesterday. Packed the trunk and motor in the morning, and sent them off at noon. Arranged to have the box sent to Washington, packed the rest of everything before tea, and went on board the Merissa about 5:30. At about 7:30 Mr. & Mrs. Hatch came aboard and had dinner with us. (It cost us \$3.00 extra.) They stayed till nine thirty.

The waiter we had was very unsatisfactory. He was English, and gave us very poor service.

We sailed at 10 P.M. for Barbados.

Station 186.

The Pelican Hotel, Kingstown, St. Vincent. A few things taken flying, ~~and~~ and 2 parrots in a chandelier. Also a large palm weevil flying in the street.

II-26-36

Reached Bridgetown, Barbados at 6:30 A.M. After seeing the Immigration Officers at 7:00, and having breakfast at 7:30, we came ashore in the first launch. The lady at the Tourist Association gave us several places to try for a place to live, and we took a taxi to look them over. They were all quite expensive, some came back. Then she phoned to Miss Harford at Highgate Guest House, and found we could stay for \$50 a month apiece. She sent her car for us and we took our baggage which was passed by the Customs after a short delay. Highgate House is about two miles out, on top of the hill, with a view and fine breezes. We got a large room and decided to stay. After a 1:30 lunch I went to town, just in time to get a Driver's License for 60s. and some Scott's Emulsion for Ruth. Miss Harford had given me a ride down in her car, and I had some trouble getting rid of her.

Meals are all very late here, breakfast at 8 A.M., lunch at 1 to 1:30, tea from 4:30 to 5:30, and dinner at 8 P.M. As many people downtown have "breakfast" around ten or eleven and close their offices, this is a rather inconvenient schedule.

II-27-36 Went down town in the morning to get a vehicle license but found the Treasury doesn't open till ten o'clock. So I went over to the office of the American Consul, Mr. Perry N. Jester, to see if there was any mail, and say Hello. Mr. Jester was very accommodating; insisted upon taking me to see Mr. Miller, head of the Dept. of Agriculture, Mr. Shilstone, a lawyer who is ^{Parliamentary} Secretary of the Barbados Museum, the Treasurer, whom he persuaded to me a license free, and then sent me home in his car. I got a very poor map of the island at a stationery store, and a fine bunch of mail at the Consulate.

After lunch I went down to get the motor. I had to go to see the Customs Commissioner, but it was finally cleared. The warehouse is too crowded to store the crate, but they kept it for the night, and I rode home on the motor.

Mr. Jester phoned later to say he had gotten in touch with Mr. Tucker, R. Agr. Entomologist, and arranged for me to accompany him on a trip to sugar estates on the island. I must meet him down town at 7:45. Tucker is apparently well-liked, a good economic entomologist, and blind in one eye.

II-28-36 At 7:45 I was at the Dept. of Agriculture, and Mr. Tucker arrived on time. Five other plant inspectors were in the party and we took two cars. We drove out along highway #3 to Lemon Arbour Estate, then on to Pool Estate, then down to the coast road at Codrington College, and to Bath Estate. At each of these three estates we stopped to study the extent of infestation of sugar cane moth borer. The number of unreapable canes in each stool (out of 100 examples) was taken, and later the number of bad sections in the reapable canes can be counted at the factories. At Bath I found some dung.

Station 187.

Bath Estate in parish of St. John on east coast. In dung found one *Xantholininae*!

We then returned to Codrington College, ate lunch on the savannah, and then went in to look at the college itself. A student showed us around the new building which replaces one burned in 1926.

Went on southwest to highway #4, turned up by Police Station G, to Mt. Pleasant Estate. After this we went northward to Pool Estate and then home on highway #3.

During the whole day we saw practically nothing but sugarcane, in various stages. Occasional half-acre plots of mahogany trees are the

only breaks in the landscape of cane. A few cattle were seen, but always by the roadside, never in pastures or corrals.

The nearest thing to native vegetation is said to be found in the parish of St. Andrew. Around the coast are cliffs of limestone and obvious terraces. I thought they were old beaches, but Tucker says the most recent theory is that they are the result of a combination of thrusts. The fossils are the same of all the levels, and this is said to show that they couldn't have been successive beaches. In this soft limestone terraces are easily made and I'm inclined to doubt the "latest theory".

We passed one of the water supplies. There is a ~~stop~~ pumping station over a shaft said to be 50 to 100 feet deep. One can go down in a bucket and walk about in a very extensive cavern beneath.

After we got back I went to the warehouse to arrange for the motorcycle crate. One of the men agreed to bring it up to the house on a hand cart for 11 shillings (round-trip). They (3 of them) arrived an hour later, pretty tired. It gives me a fine opportunity to make repairs on the crate before the next trip.

II-29-36

Leap Year's Day. I went to town, mailed some letters at the Post Office, and asked a policeman the way to the Museum. He had never heard of it, so I went to the Dept. of Agriculture and got directions. The Barbados Museum is housed in the buildings of the Garrison near the Savannah. I found Mr. Shilstone there, and was enthusiastically showed all around. The insect collections are old and dirty, and contain specimens from places other than Barbados, sometimes labelled, sometimes not. A large collection of Barbados butterflies is included, without any data, but including specimens of South American butterflies which were blown here in a great north-east storm some years ago. I found about a dozen *Staphs* in one box; mostly small and fragmentary, but definitely including a *Lafius*, and labelled as such! There is a good set of corals, sea ferns, crabs, etc., with a superb specimen of white brain coral, about 14" in diameter and perfectly formed. A collection of identified fossils, a case of 25 or 30 mounted birds, a few historical objects, a collection of native woods, the relics from a Carib kitchen midden, etc. complete the inventory. The museum is of course short of money and interest, but have a fine new set of display cases, made

locally from donated mahogany. The main display is in a fine new hall, paid for chiefly by Carnegie funds. Mr. Shilstone seems to be very enthusiastic and a good promoter. He admits to being entirely ignorant of modern museum methods but hopes to be able to employ a competent curator soon. The Carnegie people will duplicate anything they can get from the local government. They have a curator now, honorary I think, but he is a rector and seems to be little more than keeper of the keys. Mr. Shilstone asked me to consider giving an address before their society before I leave, on what I've seen of the natural history of the island. He promised to take me to see the kitchen-middens where he got the Carib relics.

III-1-36 Sunday. Stayed home today to write letters and notes. Did quite a bit of discussing with Ruth about expenses, and figured out our total and monthly expenses so far. In order to break even we must live for \$159.44 a month. We haven't done that any month thus far, though the last one was about \$165. Wrote Ed a complete summary of our accounts. Also wrote to the American Caribbean Line in Antigua about the glasses.

III-2-36

I rode out along highway #6, which passes this house, for 11 miles, passing nothing but cane fields. Here it joins #5 but I soon turned off toward the south coast past the Crane Hotel and started back along highway #7. Just now the rear cylinder of the motor gave out entirely and I feared I'd have to walk home. However, by taking a side road through Christ Church and King'sland I got back to #6 and home. I removed the cylinder heads and found the rear one full of a gummy deposit and two tablespoons of oil on top the piston. After lunch I went down town and inquired about garages for motorcycles. I was finally directed to Cole & Co., who once had a Harley agency, and still have some spare parts. None of their piston rings were right, but they have a mechanic who has a Harley and can help me when my parts arrive from Harry soon. Until then I am just stalled.

After tea Mr. & Mrs. Shilstone called on us. They are both very pleasant. He said he would try to get me a car to use till the motor is fixed. They only stayed a short time. Tucker phoned to invite us to see some sights on Saturday, and we accepted.

III-3-36 Went out on the farmstead here at Highgate and collected for an hour in dung.
Station 188.

Highgate Lust House, 2 miles east of Bridgetown. In dung took 180 Staphs (Paederinae-7, *Oxytelus*-105, Xantholininae-3, *Aleochara*-5, *Aleocharinae*, 3 sp. - 60), ²⁶Sphaeridiinae, 1 Histerid, 10 Aphodius and another sp. 33, 1 other beetle, and 9 ants.

In the afternoon I prepared for mailing three packages of samples for E.B. Also sorted out specimens and empty bottles etc., etc.

III-4-36 Spent most of the day putting away specimens. Have not finished yet. Went to town to mail letters and packages. Chuck has not arrived at the bank. Several days ago I copied the map on page 127 from a tourist folder. Mr. Shilstone phoned to report no success in his first effort to get a car. Mr. Tucker phoned to ask if I cared to accompany them again, this time to St. Lucy parish, on Friday. I accepted.

III-5-36 Walked down the hill to the Savannah, near the Museum, to collect.

Station 189.

The Savannah, Bridgetown, Barbados. In dung found 34 Staphs (Paederinae-1, Xantholininae-1, *Philonthus*-1, *Aleochara*-23, *Aleocharinae*-8),

1 Histerid, 21 Aphodius, and 13 Forficulids. These were taken in rather dry dung, nothing at all being found in fresh.

From here I walked down to the beach.
Station 190.

A small narrow beach just south of Needham Pt., Bridgetown. Under the scant seaweed I found a single *Cafius*.

I came home by bus, but had a phonerall from the Consulate that there was mail, so I went back down. There were letters from Bailey, ~~Wetmore~~, Ed, and Hicks. When I got home I found a letter from Wetmore forwarded from the bank - against my instructions! We spent the afternoon discussing Wetmore's letter and what we could do about it. It suggests a curtailing of the program to fit the money available, and requests a discussion of the present status. Ed says he may be able to send a microscope. That will be swell, if he does. Bailey sends a bill for \$90 for the crate! I had authorized him to the extent of \$50, so it was quite a shock. I guess our schedule will be rather unsteady from now on. After June anything might happen to our plans.

III-6-36

At 8 A.M. met Tucker at the Dept. of Agriculture. We drove out along highway #1 along the leeward coast to the parish of St. Lucy at the northern tip of the island. We passed through Helston and Speightstown (spikes), and stopped first at Brome Field Estate. From here we went to Husbands, Harrison, and Friendship, and Springhall Estates. At each the men made counts of sugar cane and the damage by moth borer. I tried to find some place to collect but was surrounded on all sides by the cane fields. At Friendship Estate I took a photo in the midst of a cane field (Exp. 400 + 10 at 6 ft.). At Springhall we stopped for lunch and in one of the fields I opened a termite nest. It was *Nasutitermes*, but the nest was so soft I could crush it with a light stick. I found winged forms and what may be young queens, but no royal chamber.

Photo #85

Station 191.

Springhall Estate in parish of St. Lucy, about 2 miles northeast of St. Lucy's Church. In a cane field found only a few termites.

We returned by highway no. 2, passing along the foot of cliffs, through mahogany woods, and over deep ravines or "gullies."

III-7-36

Mr. Tucker came by at 9:00 this morning to take us to see a sugar factory and the insectary. He had also another couple and a lady. We went along highway #4 into St. George's parish to the Bulkeley Estate, one of the largest in the island. We were conducted through the large and modern factory. The other man in our party asked a continual stream of questions, with the result that the rest of us heard no explanation of any of the various parts or machines. It also prolonged the tour considerably so that it became somewhat boring.

We then returned to Bridgetown, had a slight accident on a corner (ran into a donkey cart), and went to the Dept. of Agriculture. Here Mr. Tucker outlined the work against the sugar cane moth borer, showing us each step: The rearing of the corn borer host, obtaining its eggs on cards in known quantities, exposing these to the parasite - *Diatraea*, which lays its eggs in the eggs of the host; the refrigeration of the infested eggs to retard development; and the distribution to planters for liberation. The program is one which has not been successful in some countries but apparently has given a 50% increase in sugar here. The planters are

satisfied of the advantages and have put up money for its continuance. The government is not as thoroughly convinced.

Afterwards we drove to Mr. Tucker's residence in the old Officer's Barracks on the Savannah. Here we met Mrs. Tucker, and had egg-nogs & lime-ade according to taste. Then Mr. Tucker brought us home in time for lunch.

Spent the afternoon and evening at various things from naps to reading and the radio.

III-8-36

Spent the morning writing the answer to Mr. Wetmar's letter. Had to be extra careful on it. After tea Mr. & Mrs. Shilstone came by and drove us to the southern most ~~of~~ coast of the island to see the Carib kitchen-midden that is being excavated at Chancery Lane Swamps. I took a photo of Mr. Shilstone working in the pit and then we went over to the beach. Station 192.

Photo #26

Beach at Long Bay near Chancery Lane Swamps, near South Point. Under seaweed I found seven *Cafius* and a few *Carabids*.

There are some interesting bat-caves near here, but they've never been much explored. The Shilstones invited us to dinner on Thursday evening.

III-9-36

I went to town in the morning to mail letters and see the Consul. He offered to write to the Consul in Martinique for information on the rent and place of living. He also offered to lend me an old car of his - Buick for the rest of the week. As my license is for motorcycle only, he wrote a letter to the Inspector-General of Police asking if I might be given another. He also said he would give me letters of introduction to five estate owners to help out. I am to go by in the morning for the letter to the Police, and get the car in the afternoon. Started a long letter to Ed.

III-10-36

At nine o'clock I went to the Consulate, got the letters, and then went to Police Headquarters. I found that both the Inspector-General and the Deputy were in the country, and no one knew when they would be back. So I left word for them to phone and came home. At 11:30 ~~to~~ they phoned, so I went right back down. I waited half an hour for the Deputy and was then taken to the Traffic Department by an assistant, and given a license - for 60¢. At four o'clock I went down to meet Mr. Jerker, and drove him home in the old Buick. He asked me in and we had lime-squashes.

III-11-36

Tried to start out early for a day's collecting. Had to go to town for gas, etc. and lost more time finding the road out of town. We went along highway #3 through the parishes of St. Michael, St. George, and St. Joseph. At the bottom of St. Horse Hill in the latter we turned left to Fryer's Estate (Fryer's on the map!). Mr. Fryer had given me a letter to the manager, and he gave us large blunche.

Station 193.

A Fryer's Estate in St. Joseph parish, 1 1/2 miles south-west of Bathsheba. Under stones along Joe's River we found 25 Staphs (Oxytelinae-17, Paederinae-1+1, Aleocharinae-4), & 3 Carabids, 6 Hydrophilids.

B In dung we found 29 Staphs (Paederinae-2, Xantholininae-22, Philonthus-4, Aleocharinae-1), 16 Aphodius, 1 minute Histerid, 1 Hydrophilid, and 1 Chrysomelid which probably flew in. (Also many Myrmecopods along river)

This factory is reached by a steep hill and the cane carts had considerable difficulty. Extra sets of oxen or mules were busy helping them. We took a photograph of an ox cart (1/100 + 16).

From here we turned back to the southwest, passed the Bachmann Hotel, and then went along a secondary road past St. Margaret's Church and Bath Estate to Codrington College. We ate lunch on

the Savannah under the trees and then collected for a while in dung.

Station 194.

The grounds of Codrington College in eastern St. John parish. In dung we found 82 Staphs (Oxytelus-6, Paederinae-18 and 6, Xantholininae-3, Philonthus-2 + 2, Aleocharinae-43 and 2), 2 large Histerids, 56 Aphodius, 4 Sphaeridiinae, and 14 Forficulids.

We took a photograph of the main buildings of the college from across the lily pond (Exp. 1/50 + 11).

From here we continued down to Highway #4 in St. Philip parish, where we followed several side roads for some distance without finding any place to collect. We then followed the main road (#4) back to Bridgetown.

Today there was a visiting relative to tea. For three-quarters of an hour we (Ruth and I) sat through a recital of how various relatives had died and how others received the news. Ruth has finally joined me in my feeling of how completely lacking these people are in any courtesy in conversation. They are so narrow-minded self-important, and even rude that I haven't really enjoyed a meal since we've been here. Fortunately it hasn't bothered my stomach any.

Photo #87
#88

III-12-36

Photo #89

Got another "early" start today but stopped to leave some shoes to be fixed and get some gas. We followed the same route as yesterday except for a detour past St. Matthews Church, Exchange, and Applewhites. We were told that the road from Horse Hill to Bruce Vale was under repair, so we went on down the hill as before, turned to the left and then to the right and continued over the hills into St. Andrews parish near Hopewell. Stopped to look at a curious rock formation 1/2 mile east of Hopewell. It turned out to be the top of a very small anticline, with marble, limestone, and "sandstone" exposed. Apparently there had been a coal or manjak mine there. I took a few specimens of the rocks for EB. There is supposed to be an oil well near by somewhere. This parish is called Little Scotland. The view is very fine for this island but not the least bit tropical. Limestone beds twisted, and upturned outcrop all over the valley, and the whole colour scheme is one of browns.

Station 195.

Junction of Bathsheba road with Highway #2 in St. Andrews parish; bridge over untramed river. Under dung found 51 Staphs (*Oxytelus* - 1, *Paederinae* - 1 and 2, *Xantholininae* - 4, *Philonthus* - 11,

Aleocharinae - 32 (four spp.), 11 *Aphodius*, 1 minute Histerid, and 1 *Sphaeridiinae*. I tried to collect along the stream but could find nothing. The water and the banks stank terribly, and the water was full of little wriggling red worms!

About 2 miles farther on we stopped at Station 196.

St. Andrews Church on highway #2 in central eastern St. Andrews parish. In dung found only 3 Staphs (*Paederinae* - 1, *Aleochara* - 2), and 3 *Aphodius*.

From here the road climbs rapidly up over the ridge, passing several windmill-driven factories, and emerges as highway #1B onto the leeward side of the island and the cane fields. We turned off to the right and followed by-roads into St. Lucy parish, joining highway #1 near the Springhall Estate where I had been with Tucker. We followed this and a by-road to the northeast coast at River Bay. This is Station 197.

River Bay, on northeast coast of St. Lucy parish. On a small gravel beach found 1 *Capsus* and 1 brown Carabid. In a tide pool we saw many small fish and managed to catch seven shiny striped ones and one large pale one. There were in sand basins exposed to every tide.

We continued westward around the coast as far as the Bridget Flower Cove - so called. Here a staircase tunneled out of the rock leads down about thirty feet to a roomy cavern opening out to sea. It is said to contain many of the worms with colored tentacle-clusters. We didn't care to pay the 1 shilling fee so did not go down. Took a photograph of the coast looking east from here. It seems to be a continual series of overhanging cliffs, some at least appearing to be the roofs of canes broken into by the Tjurans.

We stopped to get water for the car, which overhauled terribly, and then came home along the coast on highway #1. In this northern area are many windmills running small factories. We could see ten or twelve at a time. There are no streams, no pastures, no woods, and the beaches are rather too free of seaweed, though good for bathing.

We stopped in town to get some films and the show at Bata's. After tea we had to get ready to go out to dinner at the Shilstone's. Mr. Shilstone came for us at 7:00. The others present were a Mr. Bailey, another Mr. Bailey, a Mr. Williamson, and a

We had a very nice dinner and the company was very pleasant. Mr. Shilstone served numerous alcoholic drinks and seemed hard to convince that I wouldn't take any. When he offered a toast to the king he wanted me to have some wine, but I insisted water would have to do. After dinner he told us a wild tale of his visit in 1910 to Texas. He also said the American women were far less comfortable than the English. I learned that water is sold here in Barbados on a basis not of amounts consumed but facilities. If you have a tub that could hold 50 gallons, you pay 3/6; if six tubs just alike, still only 3/6; for a shower 1/9; for 6 showers still only 1/9. These are monthly rates irrespective of the amount of water you use! I failed to find out the relationship between kilowatts and the local "units", or between cu. in. and liters.

One of the Mr. Baileys is an American who is in somewhat of a sales business. He said he imports a large amount of Japanese merchandise. Mr. Shilstone remarked a house he wanted was priced at \$10,000, but he was willing to pay \$8,000 for it anytime! His home is very nice, but I wouldn't have thought him that wealthy. He drove us home a few minutes - 11 P.M.

III-13-36

We both felt a little tired today so we decided to stay home and rest. Spent the morning counting specimens and writing in journals. Also went to town to get a look from the library and letter at the consulate (it was stamps from Wilfred in Grenada). At 4:30 we met Mr. Jester at the Yacht Club and went swimming. Afterward we went over to the Aquatic Club pavilion and had rock tails. I had a ginger ale and a lime squeeze; Ruth had a ginger ale and a rum cocktail; and father regretted the latter. Mr. Jester told us a lot about customs in these islands, and urged us to try to meet more people. He said that signing the guest book at Government House is expected of all visitors and can be done quickly. It may or may not involve one later in society. He apparently thought it would and should. He also urged us to visit the American consuls in each island, and various local officials. He thought that they could be of much service to us, but was unable to tell us how we could get out of time-consuming engagements. We have concluded that the best way is to not lay ourselves open to more invitations than necessary.

Photo #90

He offered to write the consular agent in St. Lucia to reserve a room for us and have a car to meet us at the pier the night we land - at midnight. His name is ^{Mr.} Peter. He also told us of two men in Dominica whom we should meet. They were Knowlton and ^{Andrew} Green.

III-14-36

We went out again today and took our lunch. We followed highway #2 ^{2A} and turned off on a secondary road which led to Black Bass Estate and others, but failed to take up through to the ridge road. Finding no place to stop we came back down the same road and continued northward on route #2A. Station 198.

(Photo of windmill.)

Whitchall Estate in parish of St. Peter. Along the edge of a small pond, in doing ^{we} found 26 Staphs (Xantholininae - 23, Philonthus - 2 and 1), 1 Histerid, 1 Dryopid, 14 Aphodius, and 3 Forficulids. On the mud bank I found (partly by splashing water on the mud) 29 Staphs (Acyrtinae - 19, Staphylininae - 5, Aleocharinae - 5), 3 Dryopids, 4 Hydrophilids, etc. A large number of frogs and tadpoles were in evidence, and I took one tiny fish.

From here we followed Highway 1B over into the parish of St. Andrew. The first place we found to stop was a small river bottom where cattle were tethered. One negro woman yelled

at us repeatedly and we finally made out that she said, "The cow ~~but~~ you." !!

Station 199.

The south fork of the Green River (near Greenland Estate) in parish of St. Andrews. Under dung, found 14 Staphs (Oxytelus - 1, Paederinus - 1 and 1, Xantholinus - 5, Philonthus - 2, Aleocharinae - 4), 56 Aphodius, and 1 Tortricid.

The next stop was near St. Andrews Church, and we had a large audience.

Station 200.

Highway bridge over Walker's River, near St. Andrews Church, same parish. Under stones along the river found 4 Staphs (Oxytelus - 1, Aleocharinae - 3), 1 Hydrophilid, 2 ants, and other beetle.

We continued southwest of highway #2, over Richmond Hill, and stopped for a late lunch along the road overlooking Bridgetown. A short distance farther on we turned off to the left at Jack-in-Pot Gully, finally coming out again on highway #3 without finding any places to collect.

In St. Andrews near the top of Farley Hill, I stopped to take some samples of a very light, white, and shaly limestone from a quarry. We also stopped a little further down at Cock Crow Rock.

III-15-36

Sunday. Took our lunch again and started around the southern coast. We followed route #7 through Bridgetown, Hastings, and Warthing, and St. Lawrence, and turned off to the right to South Point Lighthouse. From here we doubled back onto the main road and continued to the Crane Hotel. All this region is very dry, and has considerable saw-grass but few cattle. We found no beaches or other places to stop. From the Crane we continued along the coast to Lord's Castle. Took a photograph of the main entrance.

Station 204.

Lord's Castle on the east coast of St. Philip parish. One small hemispherical turtle flying into ear.

We then followed the coast road to Ragged Point Lighthouse, then to the end of highway #4B, up the cliff above Cadmington College to St. John's Church, along the cliff to the top of Horse Hill on route #3. We then followed route #3A, but were stopped just below Chimborazo by a bridge construction job. We then took a secondary road which led us over to route #2 at Caledonia Estate, followed this highway toward Bridgetown till we reached Stony Gully, where we turned back to the right. By following small roads in the vicinity of Canfield and Linscombe Estates we arrived in the vicinity

of Mt. Killaby, the high point — 1144 ft.
Only one place was found to collect in all this ram-
bling about. It was
Station 201.

- Farmers Stream in northern St. Thomas parish, near
A Farmers Estate. In dung found 29 Staphs (Pae-
derinae — 1 and 1 $\frac{1}{2}$, Xantholininae — 22, Philonthus — 3 and 2),
B and 29 Aphodius. Along the mud banks of the
tiny dirty stream found 27 Staphs (Cyrtelinae — 23,
Xantholininae — 4), and 4 Hydrophilids.

From Killaby we followed a steep and narrow
"road" down into the bottom of St. Andrews. We
joined the main road near Haggards Estate, ate
our lunch near a bridge over the same river as men-
tioned in station 195.

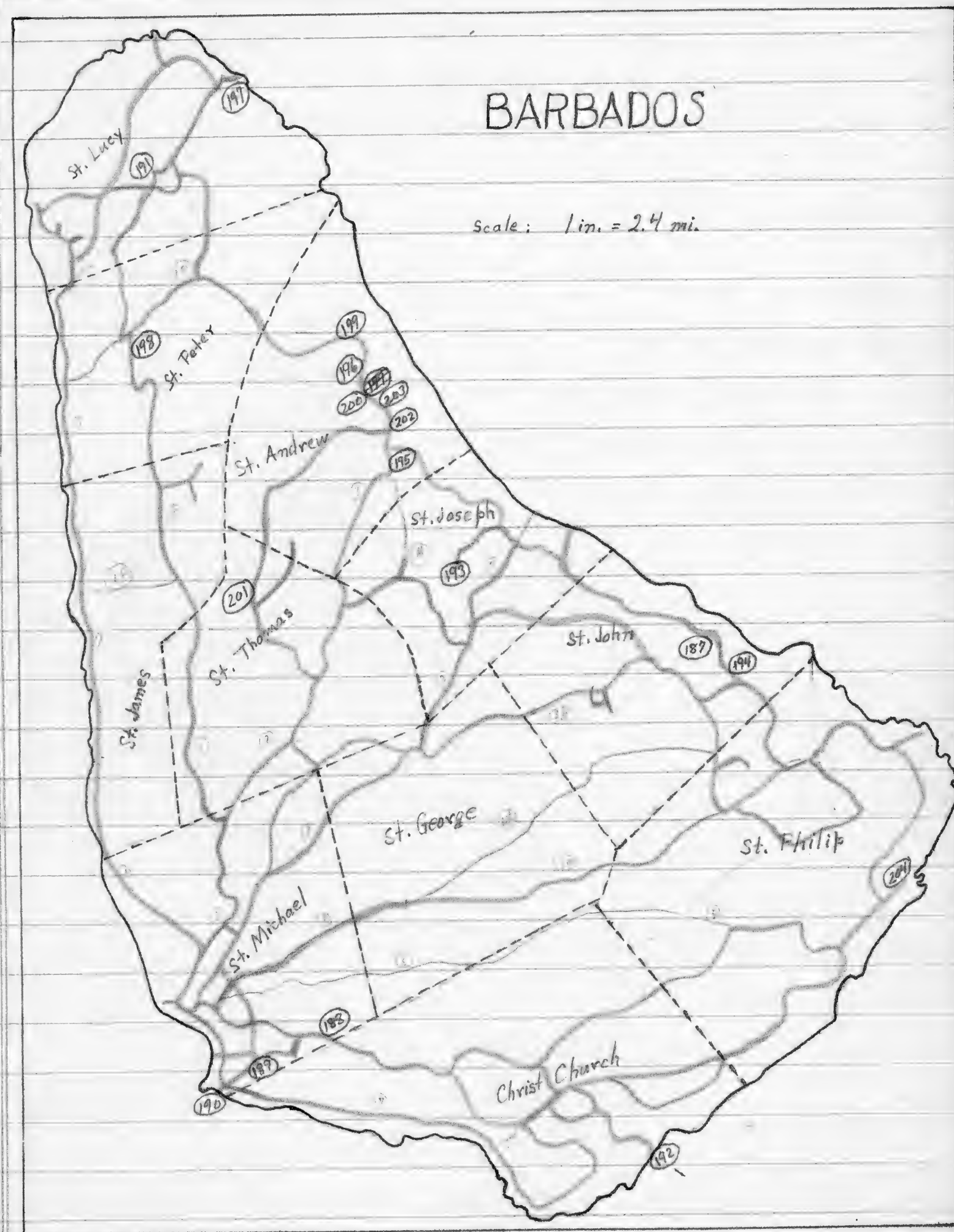
Station 202.

- $\frac{3}{4}$ mile north of station 195, a branch of the same
A river. Along the edge of the stream I found 9
B Staphs (Cyrtelinae — 8, Philonthus — 1). Under dung
Ruth took 1 Staph. (Cyrtelus) and 7 Aphodius.

About $\frac{1}{4}$ mile farther on we stopped again.

Station 203.

$\frac{1}{4}$ mile north of station 202. In dung found 18 Staphs
(Cyrtelus — 1, Paederinae — 1, Philonthus — 6, Tachyporinae —
1, Aleochara — 4, Aleocharinae — 4 and 1), and 15 Aphodius.
The Tachyporine appeared at first glance to be a



Leucoparyphus silphoides, but later seemed to be a true *Dasypharus*.

We returned along route #2 to Bridgetown, finding no further places to collect. The parish of St. Andrews has unquestionably saved this island from being very poorly represented in the present collections.

After tea I drove down to Mr. Jester's to see if he needed the car. He told me to keep as long as I needed it.

III-16-36

The *Merissa* came in from the north this morning. We went to town and I asked at the Post Office if a package had come for me. They found that one had, and after getting a free-entry endorsement from the Customs House, I was able to get it. It was from Harry Isom. Ruth went up to see Mr. Jester, and then we went to La Casca's office to inquire about reservations. The boat is already full but we will be allowed to go as far as St. Lucia. The cruise director that we met before was in the office. He was transferred back from the S.S. *Nova Scotia* after its accident. He said it has been sent to England, and there will be another boat to take its place next trip. He says the *Furness* has two fine new boats, specially

built for the tropics, which may be sent down on this run.

We went to Cole's Garage, where I asked Mr. Cole to assign a mechanic, - Marshall, to work with me on the motor at Highgate. He said that Marshall is their only electrician and they couldn't spare him. However, they'll let me work with Marshall at the garage.

After lunch I opened the package, and found there were no rings. Everything else had been sent, and no letter of explanation came. I was quite disturbed but decided to take the motor down anyway, let Marshall take it apart, so I would be able to do it alone later on. Will take it down in the morning.

At 3 P.M. Ruth and I went to the Aquatic Club to swim. The water can scarcely be called cold. I would have no compunction about diving right in.

I forgot to mention that Miss Harford had a big luncheon and bigger sea yesterday. It was a farewell affair for a relative who is moving to Trinidad. We have had sufficient contact with her relatives, so we took our lunch out and asked to have our tea sent up to our room.

III-17-36

In the morning I put the motor back together enough just to hold it, and coasted down the hill. Only had to push it about four blocks. Then with the help of Marshall and from one to six negro mechanics took off both gas tanks, ~~the rear both heads, etc.~~ We tried to take out the valve springs of the rear valve, but barely managed to get out the inlet spring. It became obvious that we could never get the cylinders off without special tools as well as directions. After considerable trying of this and that, the opinion was held by Mr. Cole and Marshall that the excess oil was caused by the oil pump and the rings were OK. We assembled everything, cut down the supply of oil, and started the motor. One cylinder, the rear, was dead, ran for an occasional gasp. It was getting a good hot spark at the right time. So we removed the head again to find a ^{had previously} tablespoonful of oil on the piston! We ~~then~~ checked the plugs, found one bad, and replaced with two new A-D plugs. Now we found a lot of dirt in the carburetor and removed the whole thing to clean. There was unburned gas in the intake manifold of the rear cylinder only. After cleaning

the carburetor and readjusting the mixture, we assembled everything again. This time the motor ran without a hitch. Before I came home we put on the new rider on the oil. I had gotten mail from the consulate, including 2 Ent. News, 2 Sciences, etc. I spent the evening reading Japic's story in Liberty.

III-18-36

Went to town in the morning. Mailed a long letter to Ed, bought some drugs with Ruth, got my boots at Bata's (they were being sewed), left a socket wrench to be fixed up for the nuts on the motorcycle crate at Cole's, and went swimming at the Aquatic Club.

Spent most of the afternoon bringing this journal up to date. Also got the chauffeur to wash the car before tea.

At 4:30 P.M. we went down to call on the Jester's. Ruth went up to visit with Mrs. Jester, and almost immediately Sir Harold and Lady Austin called. They stayed for a few minutes, and after they left Ruth came down. We had wicktails (a time squeeze), and talked till after six.

III-19-36 Station 204. (See page 125).

We went to town in the morning. Found out that the Merissa will sail Sunday at 4 P.M. This is two days late.

In the afternoon wrote a letter to the manager of Brown & Co in Antigua, about my glasses.

Today wasn't Friday but we had nothing but fish. Vegetables may be expensive here, but I don't see how they expect to live without ever eating any! Rice, bread-fruit, Irish potatoes, yams, and plantain can scarcely be called variety.

III-20-36 Went to town again to arrange for the freight on motorcycle and trunk. They must be down by Saturday morning. Went to the warehouse to tell the men to come up. At Colis Garage I paid the bill of \$3.00 for the labor on the motor, and also bought enough gas to leave ~~it~~ ^{the car} with more than we found in it.

In the afternoon packed the trunk, and at 5:30 the men came for it and the trunk. It is to stay out in the yard till the morning. The old lady nearly had a fit, and didn't come down to dinner. It was a blessing!

III-21-36

At 6:30 A.M. I was awakened by the men coming to get the case and trunk. There was no need of my being there but they didn't understand.

We went to town after breakfast to park the motor. It took me about an hour and a half. Then I came home and cleaned up, and Ruth and I went back to town. Paid \$7.53 for freight and lightage, went to say goodbye to Mr. Jester, got some medicine for Ruth, and went to the Dept. of Agriculture to see Tucker. He had left already.

After lunch we discovered that we had packed all our money in the trunk, so I had to go down and take the trunk out to the ship. I got the money out of the trunk and got home just before tea. We were surprised to have tea sent up, - we hadn't requested it! Miss Harford has been keeping out of sight all day.

After tea we went to call on Mr. Tucker, and then on the Shilstone's. Mr. Shilstone asked me to remember their desire to have an article on my collecting in Barbados for their local journal.

In the morning Mr. Jester had suggested that we try to contribute articles or pictures to the National Geographic. He said they solicit articles and are planning two West Indian numbers. He seemed to think it a wonderful opportunity.

III-22-36

Finished packing, and then had to wait for several hours for Miss Parford to come back from church. We had planned to go aboard the Merissa before lunch, but she persuaded us to stay. After lunch, I asked her to come and settle our bill. I told her I thought it was too high and that we would pay for the radio only what we used. It of course created a scene, but I was chiefly sorry for Miss Mary who will undoubtedly not hear the last of it for months. The old lady threatened to charge us garage rent, and then refused when I said I was glad to pay it.

We drove down to the pier, found the launch, and carry baggage, so hired a rowboat, after leaving the car in front of the Consulate, as instructed. We got aboard about 3:15, and found that we have a cabin - #53 on B deck. Don't really need it. Had tea at 4:00 and sailed at the same time for St. Lucia. I'm not sorry to leave.

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